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Guidelines for Documenting Historic Military Structures

by

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The Army is subject to several major Federal mandates pertaining to the preservation of historically important structures. As the Army closes, renovates, or modifies its facilities, there is a continuing need to document—in text, photographs, and drawings—historic structures that will be significantly impacted by such activities. The Secretary of the Interior, through the Historic American Buildings Survey, or HABS, has specified standards for the content, quality, materials, and presentation of this documentation.

This report provides a concise introduction to the documentation of historic structures for Army installation managers. Pertinent regulations are extracted and

paraphrased for installation managers inexperienced in coordinating historic documentation. The four different levels of HABS documentation are explained. Examples of each are presented to give the manager a benchmark for evaluating documentation produced for his or her installation. The examples are extracted from HABS documentation of the historic Red Cross complex at Chanute Air Force Base, Rantoul, IL.

Information is also provided on the basic requirements for documentation professionals and the range of per-building costs an installation manager should expect for producing each level of HABS documentation.

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Foreword

This report was prepared for the U.S. Army Assistant Chief of Staff for Installation Management (ACS(IM)) with funding through the Legacy Resource Management Program under Military Interdepartmental Purchase Request (MIPR) No. E87920274, dated 29 April 1992, "How-To Manual for Documenting Historic Military Structures." The technical monitor was Dr. Constance Ramirez, DAIM-ED-N.

The work was conducted through the Tri-Services Cultural Resources Research Center by the Environmental Compliance Modeling and Systems Division (EC) of the Environmental Sustainment Laboratory (EL), U.S. Army Construction Engineering Research Laboratories (USACERL). The USACERL principal investigator was Keith Landreth, CECER-ECC. The following individuals are gratefully acknowledged for their contributions to this report: James Bowman, Richard Hayes, and Robb McKay, CECER-ECC; and Rita Moots and Martin Stupich, working under contract to USACERL. Dr. John T. Bandy is Chief, CECER-EC, and William D. Goran is Chief, CECER-EL. The USACERL technical editor was Gordon L. Cohen, Information Management Office.

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**Tri-Services Cultural
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Center**

The Tri-Services Cultural Resources Research Center is a research and technical support center that assists the U.S. military services in the stewardship of cultural resources located within Department of Defense (DOD) installations or facilities. The Center, located at USACERL, helps installations manage their cultural resources and comply with Federal, State, and DOD preservation mandates.

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1 Introduction

Background

Department of Defense (DOD) personnel responsible for managing historic buildings on military installations are often unfamiliar with requirements for documenting historic properties. Section 106 of the *National Historic Preservation Act of 1966* (PL 89-665) requires that all Federal agencies consult with the appropriate State Historic Preservation Officer (SHPO) on any undertaking that will affect properties listed or eligible for listing in the National Register of Historic Places (NRHP). To know whether a particular undertaking (e.g., sale, lease, transfer, construction, alteration, demolition) will have an impact on an NRHP-listed or -eligible property, the installation manager must first know whether the installation contains any such properties. If it does, and the undertaking will affect these properties, then consultation with the SHPO must begin.

The outcome of these consultations is usually a Memorandum of Agreement (MOA) between the agency and the SHPO that specifies any actions the agency will take to mitigate the impact of the undertaking on the historic properties. For undertakings that will drastically impact a historic property (e.g., alteration, sale, demolition), documentation of the impacted property before the undertaking begins is often a mitigation requirement included in the MOA. Such documentation ensures that, although the property may not continue to exist in its original form (or in *any* form), an accurate and substantial record of the property will be preserved.

Often, the documentation formats required in the MOA are those developed by the Historic American Buildings Survey (HABS), an agency within the National Park Service (NPS). These formats conform to the *National Historic Preservation Act* and documentation standards established under the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* (48 FR 44716). They specify four distinct levels of documentation (referred to as Levels I through IV), each conducted to a level of detail appropriate to various functions (e.g., inventory versus mitigation), the significance of a particular property, and the severity of the impact.

If the installation manager and the SHPO agree that HABS documentation is required, the manager must consult with the HABS regional office to determine

what level of documentation should be produced. Occasionally, the level of documentation recommended by HABS does not conform exactly to any of the four standard documentation levels, but combines the requirements for different levels to best suit an unusual situation.

In its role as the Tri-Services Cultural Resources Research Center, USACERL was tasked to prepare a document that would help installation managers review architectural inventory reports, produce a scope of work (SOW), recognize reasonable cost estimates, evaluate the basic qualifications of documentation professionals, and supervise the production of historic property documentation.

Objectives

The objectives of this report are to:

- clearly and concisely explain to military personnel the requirements for documenting historic structures, including examples from completed HABS Level I, II, III, and IV reports
- help installation and cultural resource managers become better-informed consumers of historic property documentation services for the military services.

Approach

The authors reviewed "Standards for Architectural and Engineering Documentation" in the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* (48 FR 44716) and identified the elements most important to installation and cultural resource managers, then compiled those elements into a concise, plain-language summary report. A historic building complex on a military installation—the Red Cross complex at Chanute Air Force Base, IL—was completely documented according to HABS requirements. (The complex was selected because it is typical of historic buildings located on installations throughout the nation.) Examples of all four levels of HABS documentation were then prepared, and are presented in appendixes of this report.

Appropriate reference materials are cited in text as resources for installation personnel who need more detail or who have special documentation requirements.

Scope

This report does not provide all information necessary for documenting historic military buildings. The text is intended to present the essentials to personnel who have no experience coordinating and contracting for historic documentation services, and the samples are intended to illustrate the standards of quality and completeness required at each level of HABS documentation. This report focuses on HABS documentation. A companion report addressing Historic American Engineering Record (HAER) documentation is in preparation.

2 HABS Documentation Overview and Terminology

The Secretary of the Interior's Standards

Federal architectural documentation standards address the development of documentation for historic buildings, sites, structures, and objects. Such documentation usually consists of measured drawings, photographs, and written data. It provides important information about a property's significance for scholars, preservationists, researchers, architects, and engineers involved in preserving and understanding historic properties. These standards are intended for use in developing documentation to be included in the HABS collections in the Library of Congress. HABS has developed requirements for consistency of size, format, and reproducibility that address all Federal historic architecture documentation standards.

The standards, quoted in the paragraphs that follow, are extracted from the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* (48 FR 44716) under "Standards for Architectural and Engineering Documentation."

Standard I: Content

"Documentation Shall Adequately Explicate and Illustrate What is Significant or Valuable About the Historic Building, Site, Structure, or Object Being Documented."

The historical significance of the building, site, structure, or object being identified in the evaluation process should be conveyed by drawings, photographs, text, and other materials that comprise documentation. The historical, architectural, engineering, or cultural values of the property together with the purpose of the documentation activity determine the level and methods of documentation. Documentation prepared for submission to the Library of Congress must meet the HABS Guidelines.

Standard II: Quality

"Documentation Shall be Prepared Accurately From Reliable Sources With Limitations Clearly Stated to Permit Independent Verification of the Information."

The purpose of documentation is to preserve an accurate record of historic properties that can be used in research and other preservation activities. To serve this purpose, the documentation must include information that permits assessment of its reliability.

Standard III: Materials

"Documentation Shall be Prepared on Materials That Are Readily Reproducible, Durable, and in Standard Sizes."

The size and quality of documentation materials are important factors in the preservation of information for future use. Selection of materials should be based on the length of time expected for storage, the anticipated frequency of use, and size convenient for storage.

Standard IV: Presentation

"Documentation Shall be Clearly and Concisely Produced."

In order for documentation to be useful for future research, written materials must be legible and understandable, and graphic materials must contain scale information and location references.

Terminology Used in HABS Requirements

The HABS requirements comprise specific guidance and technical information to help documentation professionals achieve the Secretary of the Interior's standards. To understand the requirements, the following key terms must be defined.

Documentation—Measured drawings, photographs, histories, or other media that depict historic buildings, sites, structures, or objects.

Field Notebooks—Archival folding files, measuring 9.5 in.* by 12 in. (9.5 × 12)**, which contain the field records and field photographs of a structure. The outside cover is labeled with the name of the structure, its address, city or vicinity, county,

*U.S. standard units of measure are used throughout this report. A table of metric conversion factors may be found on page 24.

**In this report, measurements of pages or photographic images are assumed to be in inches unless otherwise specified.

state, project supervisor, team members, date of the project, and HABS survey number.

Field Photography—Small-format photography, usually made from 35 mm black and white negatives. Field photographs are intended to aid in the preparation of measured drawings and written descriptions. Field photos should be labeled with the name of the structure, HABS number, and field film roll number and frame number. The photos are submitted as part of the field notebook. Each strip of field negatives should be placed in an acid-free envelope identified by the corresponding HABS number, field film roll number, and frame numbers.

Field Records—Notes of measurements taken, field photographs, and other relevant recorded information. Field records are incorporated into the field notebook. They are customarily recorded on grid vellum paper with graphite or ink, and must be legibly produced. They are transmitted to the Library of Congress as a part of the HABS library, and are available for reading and reproduction.

Large-Format Photographs—Photographs of historic buildings, sites, structures, or objects taken on a negative measuring 4 × 5, 5 × 7, or 8 × 10. An appropriate large-format camera for this task includes perspective-correction capabilities (e.g., tiltable lens board).

Measured Drawings—Drawings produced in HABS format depicting existing conditions and other relevant features of historic buildings, sites, structures, or objects. All measured drawings must be inked on HABS-specified mylar sheets, which are available from HABS offices. These sheets have a preprinted title block and are available in two standard sizes: 19 × 24 and 24 × 36. The longer dimension is generally considered the horizontal axis for both sheet sizes. The title block on the larger sheets should be on the right side. The title block of the smaller sheets should be at the bottom. The right side of the sheet is always considered the base for drawings that require a vertical orientation.

Photographic Copy—A photograph of another photograph or drawing, made from a large format negative.

Photo Identification Sheet—A form filled in by the photographer, listing the order in which field photos were taken. The sheets are numbered to correspond to the

frame number on the film negative and corresponding contact sheet. Photo identification sheets record the:

- date on which the photos were taken
- name and location of the building
- field film number for each roll
- HABS number for the project
- description of the elevation or view
- name of the photographer.

Select Existing Drawings—Drawings of historic buildings, sites, structures, or objects, whether original construction or later alteration drawings, that depict the historic significance.

Site Plan—A two-dimensional representation of a building or structure depicting its location on the site and its relationship to surrounding features. A site plan is seen in a horizontal plane as viewed from above.

Sketch Plan—A floor plan, generally not to exact scale although often drawn from measurements, in which the features are shown in proper relation and proportion to one another. Sketch plans should be line drawings no larger than 8.5 × 11. Labels, north arrow, overall dimensions, and the date of the drawing are required.

3 HABS Documentation Requirements

The information presented in this chapter is largely based on the Secretary of the Interior's standards (48 FR 44716) under "Standards for Architectural and Engineering Documentation." The original material has been paraphrased for clarity and brevity.

Quality, Materials, and Presentation

Field Records

Field records must be readily reproducible and able to fit into the field notebook folder. Field notebooks may be photocopied. Photo identification sheets must accompany 35 mm negatives and contact sheets.

Written History and Description

Written history for Levels I and II documentation shall be based as much as possible on primary source material. For Levels III and IV, secondary source material may provide the necessary information, but primary sources may be preferable where information is vague or questionable. Appropriate citations of information sources within the written history may also be required. The written information shall include a section stating the name of the researcher, date of research, and sources searched.

Rating of District Contribution

For HABS purposes, structures documented at Levels III and IV are usually assigned significance ratings applicable to the historic district identified for documentation. The rating is intended to classify individual buildings within a larger group of historic structures.

Historic District—A geographically definable area possessing a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united by past events or aesthetically by plan or physical development. A district may also comprise individual elements separated geographically but linked by association or history.

The contribution of a building to a district is designated by a numerical value from 1 to 5, with 1 denoting the greatest contribution. Historic districts are usually determined on the basis of levels of contribution to an NRHP district, as specified in the HABS publication *Recording Historic Structures* (Burns 1989, pp 40-41). The levels of contribution are defined as follows:

- Category 1 denotes the highest historical contribution, including structures of major importance in history, architectural history, industrial history, or engineering history. For these structures, restoration or special historic structure maintenance plans are recommended.
- Category 2 includes structures of importance, or structures of major importance to which unsympathetic modifications have been made, resulting in some loss of historic integrity.
- Category 3 includes structures of minor importance that contribute to the grouping of which they are a part, or more important structures to which major modifications, resulting in a significant loss of historic integrity, have been made.
- Category 4 encompasses structures of little or no historic importance.
- Category 5 is for structures historically disconnected from the district that have intruded into a grouping of historic buildings.

These category definitions can be tailored to the historical, architectural, industrial, or engineering values established for a particular grouping of structures.

The importance of the rating system must be understood in its proper context by installation managers and planners. There is evidence that the buildings rated lower in terms of historic contribution often do not receive sufficient maintenance funding. Cultural resource managers and their superiors tend to concentrate on the most significant buildings (i.e., those in Category 1). The ratings must not obscure for managers and planners the requirement that any NRHP-eligible building, regardless of its contribution rating, must be maintained in a manner that will preserve its significant features. The HABS rating system potentially clouds the issue of NRHP eligibility. This can lead to neglect of some buildings and, consequently, failure to comply with requirements of the National Historic Preservation Act. Although the rating system may be a useful tool in managing historic districts, it must not obscure the fact that the central issue is not a building's rating, but whether it is NRHP-eligible.

Large-Format Photographs

Large-format photography is used to depict the appearance of the property and historical significance of the recorded building. All views should be perspective-corrected and fully captioned with the project number, view orientation, and date of the photograph.

Large-format photographic prints must be accompanied by their negatives. Photographs must be archivally processed and stored. Negatives must be made on safety film and submitted in individual acid-free archival sleeves. The prints must be attached to HABS-standard photographic mount cards. (The prints reproduced in the appendixes of this report illustrate how the corners of the photos are tucked into the slots precut into the mount cards.) Color negatives and prints, as well as black and white prints on resin-coated paper, are not acceptable. Prints must be completely fixed (free of light-sensitive chemicals and emulsion) and acid-neutralized. Negatives and prints must be in one of the three standard sizes: 4 x 5, 5 x 7, or 8 x 10.

Photos for Level I and Level II documentation should include all elevations, photographs of significant interior rooms or divisions, photographs of the site, and detail photographs illustrating important aspects of the structure.

Photos for Level III documentation generally include only a few views of the building's exterior.

Level IV does not require large-format photos. Pictures recorded on 35 mm black-and-white film are usually adequate.

Chapter 4 of Burns (1989) includes information and technical assistance related to architectural photography for documenting historic buildings. Another source for technical information on photography is the HABS/HAER publication *Photographic Specifications* (National Park Service 1989).

Measured Drawings and Sketch Plans

Measured drawings must be produced from accurate recorded measurements. Portions of a building not accessible for measurement should not be delineated, and should be labeled "not accessible." Drawings of inaccessible building areas may be compiled from available construction drawings or other properly identified sources. No part of a drawing should be produced on the basis of theory, assumption, or any other technique not based on an actual measurement.

Level I documentation sheets should be lettered mechanically (i.e., by template) or hand-printed in an equivalent, uniform style. Level I documentation also requires a set of field notebooks in which the original measurements were recorded, to accompany the measured drawings.

All measured drawings are to be produced on HABS-specified mylar sheets with archivally stable ink intended for use on plastic film.

Level II and Level III documentation require a statement of where the original drawings prepared for documentation are located.

Level III sketch plans must be clear and orderly.

Level IV requires a site plan drawing.

The National Park Service publication *HABS/HAER Guidelines: Recording Structures and Sites with Measured Drawings* (HABS 1993) includes detailed instructions and requirements for producing measured drawings. This publication is available from regional HABS offices—see Appendix A for addresses and telephone numbers.

Levels of Documentation

The four levels of documentation specified by HABS are outlined in the paragraphs that follow. Each level requires different degrees of detail and types of information. The kind and amount of documentation needed is determined through consultation with the HABS regional office. The level of required documentation is directly related to the nature and significance of the building, site, structure, or object being documented. As a general rule, Level I or II documentation is required for nationally significant structures.

Level I

- Written data: detailed history and description.
- Photographs: photographs of exterior and interior views on large-format negatives; photographic copies of select existing drawings or historic views, on large-format negatives.

- **Drawings:** a full set of measured drawings, including site plan, floor plan(s), elevations, sections, and construction details depicting existing or historical conditions.

Level I documentation is required for nationally significant structures, such as those listed as National Historic Landmarks or those of primary historic significance. When a nationally significant structure is undergoing extensive alteration—whether by addition, remodeling, or demolition—Level I documentation is generally required. Level I documentation serves as a mitigating effort to record the structure by providing a complete record of it before alteration.

Level II

- **Written data:** detailed history and description.
- **Photographs:** photographs of exterior and interior views on large-format negatives.
- **Drawings:** select existing drawings, where available, should be photographed on large-format negatives or photographically reduced mylar.

Level II documentation differs from Level I mainly in that only existing drawings—either original or alteration drawings—are included. The exclusion of measured drawings represents a significant cost savings because measured drawings usually cost more than the rest of the report.

Example of Level I and Level II Documentation

Appendix B contains a complete HABS submission for the Red Cross complex at Chanute Air Force Base (AFB). Photocopies of measured drawings, photographic copies, and photographs are included for clarity. For purposes of brevity, however, copies of the field notebooks are not reproduced.

Please note that no set number of photos or drawings is required for Level I or II documentation. The number of photos and drawings will vary from one building to the next, but all significant aspects of the building must be covered.

The document reproduced in Appendix B serves as an example of both Level I and Level II documentation. Level I documentation includes all elements—written report, large-format photographs, existing building plans, and measured drawings. Level II documentation includes all the same elements except the measured drawings.

Please note that the example in Appendix B is so detailed because the information was available. This depth of detail may not be available for all structures requiring Level I or Level II documentation.

The measured drawings used in the example were produced with a computer-aided drafting and design (CADD) system. These drawings provide an acceptable level of detail, but it is not necessary to produce HABS measured drawings using a CADD system.

Level III

- **Written data:** a short outline (up to several pages) to provide identifying information for accompanying HABS documentation.
- **Photographs:** photographs of exterior and interior views on large-format negatives.
- **Drawings:** sketch plan.

Level III documentation is appropriate for projects of extensive scale, where many buildings are to be documented. Level III reports require only a sketch plan and large-format photographs to record primary elevations and interior views of each structure in the project area. Individual structure forms are integrated with an overview report that summarizes all structures and places them in context. Additionally, Level III documentation collects information necessary for developing documentation for other purposes, such as state or local archives.

Level IV

- **Written data:** a short outline (up to several pages) to provide identifying information for accompanying HABS documentation.
- **Photographs:** black-and-white prints, made from 35 mm film, showing the building exterior.
- **Drawings:** site plan.

Level IV documentation is generally used for inventory purposes but is rarely accepted for mitigation purposes. Regional HABS offices, however, may accept Level IV submissions for their own records.

Level IV is similar to Level III, except 35 mm black-and-white prints are accepted in place of more expensive large-format photography. This form of documentation is most useful for determining which buildings at an installation are NRHP-eligible and will require Section 106 consideration. The written data is identical for both Level III and Level IV. A Level IV document prepared for inventory purposes can easily be converted to a Level III document by adding large-format photographs and sketch plans.

Example of Level III and Level IV Documentation

Appendix C includes a complete HABS outline for the Red Cross Administration Building at Chanute AFB. Reproductions of the Level III sketch plans and the Level IV site plan have been included for clarity. The site plan and sketch plans are reproductions of the measured drawings created for the Level I example. In most Level III and Level IV documentation, the site plan often will not be to scale, and the sketch plans will be less detailed and employ only an approximate scale. For Level III documentation, photographic content and indexes are essentially the same as for Levels I and II. Therefore, no photos or indexes are included in Appendix C. Level IV documentation requires only 35mm photographs of exterior views, similar to those shown in the Level I and II example. Refer to Appendix B for photo illustrations.

The Level III and Level IV example in Appendix C was produced using the Integrated Building Inventory System (IBIS), a computer database application developed by USACERL. IBIS can be used in conjunction with the Cultural Resources Information System (CRIS) to quickly and easily produce baseline inventories and low-level documentation for any number of structures. The baseline documentation can then be used as the foundation for a management database. Information for the four large memo fields in IBIS—description, history, significance, and sources—can be keyed into a word processing program, saved as an ASCII* file, and imported into IBIS.

IBIS and CRIS are available from the USACERL Technical Assistance Center's Cultural/Natural Resources Team (CECER-TAN), 1-217-373-4420. User documentation for IBIS is expected to be released in the fourth quarter of FY94; user documentation for CRIS is also scheduled for publication in the fourth quarter of FY94.

* ASCII: American Standard Code for Information Exchange.

4 Issues in Acquiring Documentation Services

Professional qualifications and costs are two important issues that may initially be a mystery to installation or cultural resource managers who have no experience acquiring documentation services. The material in this chapter is not a complete guide to acquiring documentation services, but is intended to inform the manager about the baseline qualifications required of a documentation professional, and to provide some "ballpark" cost figures to assist with budget and contracting estimates.

Professional Qualifications Required for Documentation Professionals

The National Park Service has defined minimum education and experience requirements for professionals performing identification, evaluation, registration, and treatment for historic properties (36 CFR 61). Depending on the nature of the historic structures involved and the requirements of the task, other areas and levels of expertise may be needed. In the following definitions, a year of full-time professional experience need not literally be a year of continuous full-time work, but may comprise discontinuous periods of work adding up to the equivalent of 1 year.

Most candidates for this work will have education and experience in history, architectural history, architecture, or historic architecture.

History

The minimum professional qualifications in history are a graduate degree in history or a closely related field; or a bachelor's degree in history or closely related field plus one of the following:

1. At least 2 years of full-time experience in research, writing, teaching, interpretation, or other demonstrable professional activity with an academic institution, historic organization or agency, museum, or other professional institution
2. Substantial contribution through research and publication to the body of scholarly knowledge in the field of history.

Architectural History

The minimum professional qualifications in architectural history are a graduate degree in architectural history, art history, historic preservation, or a closely related field, with coursework in American architectural history; or a bachelor's degree in architectural history, art history, historic preservation, or a closely related field, plus one of the following:

1. At least 2 years of full-time experience in research, writing, or teaching in American architectural history or restoration architecture at an academic institution, historical organization, museum, or other professional institution
2. Substantial contribution through research and publication to the body of scholarly knowledge in the field of American architectural history.

Architecture

The minimum professional qualifications in architecture are a professional degree in architecture, plus at least 2 years of full-time experience in architecture or a state license to practice architecture.

Historic Architecture

The minimum professional qualifications in historic architecture are a professional degree in architecture or a state license to practice architecture, plus one of the following:

1. At least 1 year of graduate study in architectural preservation, American architectural history, preservation planning, or a closely related field
2. At least 1 year of full-time professional experience on historic preservation projects.

Graduate study or experience should include detailed investigations of historic structures, preparation of research reports on historic structures, and preparation of plans and specifications for preservation projects.

Photography

Due to the highly technical nature of the photographic requirements for HABS documentation, it is generally best to contract with a professional photographer rather than use inhouse personnel. For most levels of documentation the

photographer must have access to complex large-format cameras and related equipment—and must be experienced and competent in the use of that equipment.

According to the publication *Photographic Specifications* (National Park Service 1989), it may be a good idea for the contracting agency to state in the contract that final payment will not be issued until the product is approved by the National Park Service.

Costs

The cost of documentation can vary widely depending on factors such as required level of documentation, complexity of the structure, and availability of local labor. Undertakings that require mitigation through HABS documentation often involve multiple buildings. Significant economies of scale can be achieved through the documentation of more than one building at a time, particularly when the installation must cover travel costs. Some general guidelines for the cost of documentation production follow.

Please note that dollar figures rather than person-hours have been specified in the following discussion. The actual number of hours put into documentation can vary widely depending on the complexity of the building and the skill of the person providing the documentation service. Costs such as travel, travel time, *per diem*, and regional variations in costs of services provided should be factored into any HABS documentation cost estimate. As long as the final product meets all HABS requirements and documentation milestones are met, the number of hours the contractor needs to finish the work should make little difference to the contracting officer. The objective is to get the work done to meet HABS requirements at a reasonable cost.

Documentation Packages

HABS, universities, and private contractors commonly offer documentation services as a package, assembling all documentation elements themselves. This may be a good approach to the task because it centralizes control of the process with the contractor rather than installation personnel. However, caution must be exercised to verify the professional qualifications of the documentation team.

Level I documentation usually costs between \$5,000 and \$15,000 per building, depending on the complexity of the building and the number of measured drawings required. Level II documentation can usually be completed for \$1,500 to \$3,000 per building.

Because Level III and Level IV documentation are most often undertaken for multiple structures, the cost per building is less predictable. Economies of scale can reduce the per building cost, particularly for highly repetitive buildings (e.g., housing areas). The lower end of the Level III price range is constrained by the considerable cost of the required large-format photographs. Level III documentation costs per building should range from \$600 (for a single building) to as little as \$200 (for a number of buildings requiring few photographs).

Level IV documentation is considerably less expensive because only 35 mm photographs are required. Level IV documentation is almost never done on a single building, so economies of scale tend to lower the cost per building. The photographs add very little to the total cost, so documentation should cost between \$155 and \$250 per building.

Written Information

Installations with qualified personnel on staff may complete the written report in-house at a considerable savings. The regional HABS office should be consulted as early in the process as possible. A draft of the completed report and photocopies of the large-format photographs are sent to the HABS regional office for review. The comments and corrections from the regional office are then incorporated into the final document, and all materials are sent to HABS.

Installations that do not have qualified writers or do not want to use staff members for HABS documentation can hire qualified outside contractors. Many universities with architecture programs will contract for writing reports, as will HABS regional offices and private contractors.

Written reports are subject to great economies of scale, particularly for Levels III and IV. The cost of producing a written report for Level I or II generally ranges from \$1,000 to \$2,500 per building. A single report will cost close to the top of the range, but the average cost decreases quickly for additional reports. The cost of a Level III and IV written report is less predictable. A single Level III or IV report may cost as much as \$400. If there are many buildings, particularly highly repetitive types such as housing, the cost per building may be very low, as little as \$150 to \$200 each.

Large-Format Photography

Installations that have a professional photographer on staff can save money on perspective-corrected large-format photos. The cost of hiring an outside professional photographer experienced in HABS documentation varies widely.

Some charge by the photograph (as much as \$100 each) while others charge by the day (usually between \$400 and \$700). Most buildings can be photographed in 1 day, but large or complex buildings requiring numerous photographs may require 2 days. Development and printing costs are usually included in the price, although travel expenses are not.

Measured Drawings

Measured drawings are the most expensive form of documentation, and are required only for Level I documentation. These are generally required for National Historic Landmarks (the most exclusive category of NRHP nomination), but may be appropriate for other important structures. If the building is to be rehabilitated, measured drawings may provide a valuable tool even if Level I documentation is not explicitly required.

The current cost of a single measured drawing may range from \$1,000 to \$5,000, depending on the complexity of the building elements and the number produced. The documentation of a single building typically requires between 4 and 12 measured drawings.

New technologies such as CADD and photogrammetry—a process for creating measured drawings through the use of photographic images—promise eventually to lower the cost of producing measured drawings. However, such systems are still under development, and require skilled photographers and operators.

Reproduction of Existing Drawings

Photomechanical transfers (PMTs) are not acceptable for reproduction of existing drawings. The drawings are generally photographed onto 8 × 10 sheet film, which is then archivally processed and printed on archival fiberbase paper.

If the installation has an 8 × 10 camera, a copy stand that can accommodate the camera, and a professional photographer who is qualified to use the equipment, existing drawings can be reproduced in-house. Otherwise, a properly equipped professional photographer may be hired. A commercial blueprint service may also have the required equipment and expertise for transferring existing drawings to 8 × 10 sheet film.

The cost for the negatives range between \$10 and \$40 apiece. Print costs also range between \$10 and \$40 apiece.

5 Summary

The Army is subject to several major Federal mandates pertaining to the preservation of historically important structures. As the Army closes, renovates, or modifies its facilities, there is a continuing need to document—in text, photographs, and drawings—historic structures that will be significantly impacted by such activities. The Secretary of the Interior, through the Historic American Buildings Survey, or HABS, has specified standards for the content, quality, materials, and presentation of this documentation.

This report has provided a concise introduction to the documentation of historic structures for Army installation facility and cultural resource managers. The Secretary of the Interior's standards are extracted and paraphrased for installation managers who have no previous experience coordinating the documentation of historic facilities. The four different levels of HABS documentation are explained, and examples of each are presented to give the manager a benchmark for evaluating documentation produced for his or her installation.

Information is also provided on the basic requirements for documentation professionals and the range of per-building costs an installation manager should expect for producing each level of HABS documentation.

Metric Conversion Table

1 ft.	=	0.3 m
1 in.	=	25.4 mm
1 gal	=	4.5 L
1 knot	=	30.85 m/sec
°F - 32/1.8	=	°C

References

Cited

Burns, John A., *Recording Historic Structures* (American Institute of Architects Press, Washington DC, 1989).

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Photographic Specifications: Historic American Buildings Survey/Historic American Engineering Record (Division of National Register Programs, National Park Service, San Francisco, 1989).

Public Law 89-665, *National Historic Preservation Act* (15 October 1966).

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"Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation," *Federal Register*, vol 48, no. 190, part IV (29 September 1983), pp 44716-44740.

Uncited

Borchers, Perry E., *Photogrammetric Recording of Cultural Resources* (Technical Preservation Services, U.S. Department of the Interior, Washington, DC, 1977).

Chambers, J. Henry, *Rectified Photography and Photo Drawing for Historic Preservation* (Technical Preservation Services, U.S. Department of the Interior, Washington, DC, 1975).

Historic American Buildings Survey/Historic American Engineering Record, *HABS/HAER Guidelines: HABS Historical Reports* (National Park Service, Washington, DC, 1993).

Historic American Buildings Survey/Historic American Engineering Record,
HABS/HAER Guidelines: Transmitting HABS/HAER Documentation
(National Park Service, Washington, DC, 1993).

Appendix A: HABS Regional Offices

HABS documentation efforts are coordinated through the four HABS regional offices, which report to the national office in Washington, DC. The appropriate regional office should be contacted early in the project, and is available to provide additional technical information, archival materials, submission procedures, and guidance on accessing information in the HABS collection.

Alaska Region

Address inquiries to:

HABS/HAER Coordinator
Alaska Regional Office
National Park Service
2525 Gambell Street
Anchorage, Alaska 990503

Telephone: 907-257-2547

Mid-Atlantic Region—includes Connecticut, Delaware, Indiana, Maine, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia.

Address inquiries to:

HABS/HAER Coordinator
Mid-Atlantic Regional Office
National Park Service
Custom House
2nd & Chestnut Streets, Room 251
Philadelphia, Pennsylvania 19106

Telephone: 215-597-6484

Southeast Region—includes Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee.

Address inquiries to:

HABS/HAER Coordinator
Southeast Regional Office
National Park Service
75 Spring Street, Suite 1150
Atlanta, Georgia 30303

Telephone: 404-331-7719

Rocky Mountain Region—includes Colorado, Illinois, Iowa, Kansas, Minnesota, Missouri, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Utah, Texas, Wisconsin, Wyoming.

Address inquiries to:

HABS/HAER Coordinator
Rocky Mountain Regional Office
National Park Service
12795 W. Alameda Parkway
Denver, Colorado 80225

Telephone: 303-969-2875

Western Region—includes Arizona, California, Hawaii, Idaho, Nevada, Oregon, Washington.

Address inquiries to:

HABS/HAER Coordinator
Western Regional Office
National Park Service
450 Golden Gate Avenue
San Francisco, CA 94102

Telephone: 415-744-3988

Appendix B: Example of Level I and Level II HABS Documentation

Red Cross Complex
Southwest Corner of Eagle and Borman Drives
Chanute Air Force Base
Rantoul
Champaign County
Illinois

HABS No. IL-1161

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

PHOTOGRAPHS

Historic American Buildings Survey
National Park Service
Rocky Mountain Regional Office
Department of the Interior
12795 W. Alameda Parkway
Denver, Colorado 80225

HISTORIC AMERICAN BUILDINGS SURVEY

RED CROSS COMPLEX

HABS No. IL-1161

Location: Southwest corner of Eagle and Borman Drives
Chanute Air Force Base
Rantoul, Champaign County, Illinois

USGS Rantoul Quadrangle, Universal Transverse
Mercator Coordinates: Zone 16
Northing 4461220
Easting 401760

Present Owner: American National Red Cross
National Headquarters
17th & D Streets, N.W.
Washington, DC 20006

Original Use: Red Cross Field Director's Office, Residence,
and Garage

Present Use: Vacant

Significance: The Red Cross Complex at Chanute Air Force Base physically and symbolically reflects the mission of aid to servicemen that stands as a distinguishing characteristic of the American National Red Cross. Built at the height of America's World War II military construction activities, the Red Cross Complex provided a link between civilians and servicemen at Chanute during a time of intense interaction between both groups. The Administration Building's shape and colors physically reproduced a red cross, thereby using form to declare function. The resultant complex is architecturally unique among other temporary World War II structures on the base.

RED CROSS COMPLEX
HABS NO. IL-1161 (page 2)

PART 1. HISTORICAL INFORMATION

A. Physical History

1. Date of Erection: 1941
2. Architect: Not Known
3. Original and subsequent owners:

The American National Red Cross (1941-1993)

4. Builder, contractor, suppliers: Construction resulted from a contract between the Army Corps of Engineers and E. N. DeAtley of Champaign, Illinois. Mr. Frank Bosley acted as superintendent of construction for the Champaign contractor (Chanute Field Wings 1941c).
5. Original plans and construction: Original plans for the structure could not be located during research investigations.
6. Alterations and additions: The Red Cross Complex buildings were altered through the re-siding of the structures in 1978 and the remodeling of the apartment kitchen and bathroom in 1988. Additions of a handicap ramp and landing were added to the west side of the Administration Building in the early 1980s.

B. Historical Context:

The Red Cross Complex was constructed during 1941 and 1942. Intended to provide a headquarters facility for Red Cross services, this complex fulfilled its purpose for over fifty years by housing Camp Service activities designed to meet the social and psychological needs of individuals and groups on the base. The rapid expansion of the Armed Forces in connection with World War II was responsible for both the revitalized development of Chanute Air Force Base and the associated growth of the Red Cross Camp Service. The history of the Red Cross Complex is interwoven with that of the base, as the history of the American Red Cross is linked with that of the Armed Forces.

RED CROSS COMPLEX
HABS NO. IL-1161 (page 3)

At its official founding in 1881, the American Red Cross society was chartered to help sick and wounded soldiers in war, to provide disaster relief, and ". . . to serve as a medium of communication between the people of the United States and their Army and Navy . . ." (Dulles 1950, 1). The American Red Cross was granted a charter by the United States Congress in 1900, authorizing them to provide services to members of the Armed Forces (American Red Cross 1989). This obligation was largely fulfilled by the establishment of base facilities staffed by field directors. The first instance of Red Cross personnel in place on military bases occurred in 1898 during the Spanish-American War when field agents sent to Army camps participated in the distribution of supplementary supplies for Army camps and hospitals (Dulles 1950, 45-46). Over time, Camp Service activities evolved into an organized effort ". . . to help individual soldiers, sailors and marines with personal problems that ranged from assistance in getting furloughs to counseling on marital problems" (Dulles 1950, 397). Field directors and their staff provided consultation and guidance, information referrals, reporting services, assistance with family communications, and health services.

With the United States' entry into World War II, the American Red Cross underwent a period of rapid growth concurrent with military expansion. From July 1941 to June 1942, personnel in Services to the Armed Forces increased 381 percent, from 641 to 3,088 (American Red Cross 1942, 18). "On June 30, 1942 resident field directors were stationed at 260 army posts and naval stations in the United States and at 37 posts overseas. Assistant field directors were being assigned on a basis of one to each five thousand men in the armed forces" (American Red Cross 1942, 22). This expansion necessitated the construction of new facilities. By the end of June, 1942 Red Cross buildings had been completed on 58 bases, with 45 more in the planning stages, and Camp Service covered 600 Army camps and naval stations on a resident basis at the height of its wartime activity (American Red Cross 1942, 23; Dulles 1950, 402).

The United States Armed Forces were also expanding at this time in preparation for the impending war. Until the pre-war mobilization period, all military construction had been under the control of the Office of the Quartermaster General (OQMG), while the Corps of Engineers (COE) had responsibility for civil

RED CROSS COMPLEX
HABS NO. IL-1161 (page 4)

projects. As war approached and military construction projects burgeoned, the Quartermaster Corps became overburdened while the COE was looking for new assignments. As a result of the ensuing shake-out, Air Corps construction was transferred to the COE in November of 1940 (Fine and Remington 1972, 244, 267). One year later, on 1 December 1941, President Roosevelt signed a bill giving all military construction functions to the COE (Fine and Remington 1972, 473). As circumstances would have it, there was little time for settling into these new roles.

The impact on the Corps of Engineers produced by the Pearl Harbor attack was felt immediately, as the period from 1 December 1941 to 1 September 1942 saw the most intense World War II military building activity (Fine and Remington 1972, 564). During 1942, the Corps of Engineers and local contractors completed 2,091 jobs including 482 Air Force facilities, 389 Ground Force facilities, 164 storage and shipping facilities, and 149 industrial facilities (Fine and Remington 1972, 521). This enormous building drive impacted nearly the entire country, including Chanute Air Force Base in Rantoul, Illinois.

Begun in 1917 as a training field for aviators, and named for Octave Chanute who pre-dated the Wright brothers as an aviation pioneer, Chanute Field has always been primarily a technical training center (King and Peyton 1991, 11-12). After training 18 squadrons, the Armistice signaled the beginning of a period of decline for the base, as it was downgraded to a storage depot and remained that way until 1921 when the Army Enlisted Mechanics School was assigned to Chanute (King and Peyton 1991, 15-16). By 1926, the base hosted the Air Corps Technical School involving mechanics, photography, and communication (King and Peyton 1991, 16).

The next major building phase at Chanute occurred in preparation for the coming war. The need for aviators increased and the training facilities at Chanute were expanded to accommodate the influx. The period from 1938-1941 became known as the "Great Renaissance" due to the large amount of construction and revitalization which occurred at the base. Structures including barracks, a hospital, a headquarters building, warehouses, hangars, theaters, family housing, and a fire station were developed (Bush and Cardinal 1990, 16). Chanute's present built

RED CROSS COMPLEX
HABS NO. IL-1161 (page 5)

environment is largely a reflection of this period of expansion as many of these buildings are still in use.

The numbers of servicemen at Chanute expanded even more rapidly than the built environment. In June 1939, there were 2,000 personnel at the base. By May 1941, this number had grown to 21,000. The increase in population produced an increase in the need for Red Cross services. The Red Cross announced in August 1941 that they would build a facility at Chanute, and later that autumn construction began on a new Red Cross complex which would house the field director, his family, staff offices, and multi-purpose rooms (U.S. Air Force 1987, 25-26).

The Administration Building, dedicated in March 1942, followed one of the four basic headquarters building plans used by the Red Cross during this time (Roland Born, telephone interview, 28 September 1992). Being cross-shaped with a red-shingled roof, the building's form created a "red cross" easily distinguishable from the air, providing protection in case of enemy air attack. Unique among Chanute buildings for this functional declaration, the Administration Building is also ". . . the only wooden structure on the base that reflects classical architectural style and detail" (Bush and Cardinal 1990, Appendix B).

When construction of the complex was begun, the Chanute Field Red Cross office had a staff of five handling an average of 500 cases a month, most of which involved requests for emergency furloughs or dependency discharges (Chanute Field Wings 1941a). This represented a nine-fold increase over the monthly caseload of the previous year (Chanute Field Wings 1942a). Mr. Robert A. Clough, the field director at the time, ascribed the increase to elevated financial burdens on soldiers' families resulting from the war (Chanute Field Wings, 1942a). As the caseload increased, so did the Red Cross staff. Three new assistant field directors arrived the first week of March (Chanute Field Wings 1942c). By July, Chanute Field had been designated as a training post for future Red Cross field directors, and six new assistant field directors had arrived to begin their training (Chanute Field Wings 1942e).

After the war, stateside bases saw increased activity as soldiers were processed through separation centers for demobilization. The Red Cross field directors were personally involved in helping discharges file disability claims and receive information about

RED CROSS COMPLEX
HABS NO. IL-1161 (page 6)

the G.I. Bill of Rights. By 1946-47, this task was over and Red Cross Camp Service had been reduced from 3,693 to 639 (Dulles 1950, 512-513). Only the larger installations retained field directors, however, the services they had offered in the past remained in place, including counseling and emergency financial aid (American Red Cross 1951, 50-51).

At Chanute AFB, the Red Cross Complex continued through the years to shelter the same activities that the service had always offered. The classroom was used for instruction in first aid, CPR, social welfare and other courses (U.S. Air Force 1967, 27). A succession of field directors and their families inhabited the Administration Building, and the offices were continuously utilized by staff. Although the Red Cross services remained constant, other aspects of Chanute AFB did not. Runways were closed to military air traffic in June 1971, and the base is scheduled for closure by September 1993 (King and Peyton 1991, 26). In acknowledgement of the dwindling numbers stationed at Chanute, the Red Cross field director's office was closed in August 1992. After providing continuous service and retaining its original function for fifty years, the Red Cross Complex now stands vacant.

Prepared by: Susan Ensore

Title: Historian

Affiliation: Tri-Services Cultural Resources Research Center
U.S. Army Construction Engineering Research
Laboratories

Date: October 1992

PART II. ARCHITECTURAL STATEMENT:

A. General Statement:

1. Architectural Character: This is an intact Red Cross military installation facility that was occupied from 1942 to 1992 at Chanute Air Force Base, Rantoul, Illinois. The complex includes an original Administration Building with a tall central mass and two projecting wings, and a three-bay garage. (See photographic documentation HABS no. IL-1161-1

RED CROSS COMPLEX
HABS NO. IL-1161 (page 7)

through IL-1161-6, and HABS drawings IL-1161, Sheets 1 and 2).

2. Condition of the Fabric: General condition of the exterior envelopes are good, due partly to the fact that the buildings underwent exterior renovations in August 1978. The improvements involved the removal of the original 1"x8" shiplap siding and decorative moldings, and replacement with 1"x12" hard board siding. Weathering has occurred at the window frames, with flaking and peeling paint and some sills beginning to rot. All the corner flashings show some minor bending and denting. The roofing material is in generally good condition, but some leaking of water to the interior was apparent in the class room, general office, and office hallway of the Administration Building. The interiors are in good shape having had only minor remodeling since construction.

B. Site:

1. General Setting: The Red Cross Complex is located in Chanute Air Force Base, Rantoul, Illinois. The Red Cross Administration Building faces east with its long axis parallel to Eagle Drive. The Garage is oriented the same way, and is located approximately forty feet to the west and slightly south of the Administration Building. An asphalt driveway enters south of the Administration Building on Eagle Drive and ends in a small parking lot immediately east of the Garage. The site is predominantly flat.
2. Buildings: The complex includes an Administration Building with a tall central mass and two projecting wings, HABS No. IL-1161-A, and a three-bay Garage, HABS No. IL-1161-B.
3. Landscaping, Enclosures: The buildings are located on an expanse of turf (primarily fescue) which covers most of the site. All four perimeters, however, have been planted with trees. Adjacent to Eagle and Borman Drives are single rows combining Green Ash, Sycamore, and a Black Willow. The western perimeter is planted with White Spruce, and the southern edge contains a mixture of Austrian Pine, Eastern White Pine, Northern White Cedar, Scotch Pine and Norway Maple. In addition, a large Norway Maple is located in the

RED CROSS COMPLEX
HABS NO. IL-1161 (page 8)

southwest quadrant of the site. There are four rose bushes north of the Administration Building, and a combination of Japanese Barberry, Common Juniper, and Privet shrubs are located adjacent to the east elevation of the same building.

Prepared by: Robb McKay and Mira Metzinger
Title: Architect
Affiliation: Tri-Services Cultural Resources Research Center
U.S. Army Construction Engineering Research
Laboratories
Date: August 1990, October 1992

PART III. SOURCES OF INFORMATION

- A. Architectural Drawings: Existing Drawing, "Chanute Field Illinois, Red Cross Building, Elevations," by N.B. Popov for U.S. Engineer Office, Chicago District Air Corps, Construction, Feb. 12, 1943.

Measured Drawings produced for documentation are located at the Tri-Services Cultural Resources Research Center, U.S. Army Construction Engineering Research Laboratories, Champaign, Illinois.

- B. Historic views: (2) Photographs - Corps of Engineers, Louisville District, PhotoFile:

(1) File #7719 - Caption: "Chanute Field, Rantoul, Illinois. Red Cross Building. Looking North over Foundation Forms. Construction by Red Cross on contract. (S.I. & L. only by U.S. Engineer Dept.)", 4 December 1941.

(2) File #7796 - Caption: "Chanute Field, Rantoul, Illinois Red Cross Building complete except for Interior Trim. Constructed by Red Cross on contract. (S.I. & L. only by U.S. Engineer Dept.)", 21 January 1942.

- C. Interviews:

Mr. Roland Born, Red Cross Field Director, Telephone, Goodfellow AFB, Texas, 28 September 1992.

RED CROSS COMPLEX
HABS NO. IL-1161 (page 9)

D. Bibliography:

1. Primary and unpublished sources: None

2. Secondary and published sources:

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_____. 1942a. "Red Cross Cases Jump Nine-Fold." Chanute Field, 30 January, p. 6.

_____. 1942b. "Red Cross Occupies New Building Here." Chanute Field, 27 February, p. 1.

_____. 1942c. "Three Red Cross Leaders Arrive." Chanute Field, 6 March, p. 2.

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HABS NO. IL-1161 (page 10)

_____. 1942e. "Field is Red Cross Training Center."
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Measured Drawing. 1943. "Chanute Field Illinois, Red Cross
Building, Elevations." by N. B. Popov for U. S. Engineer
Office, Chicago District Air Corps, Construction.

U.S. Air Force. 1967. "Central Illinois Congratulates Chanute
Technical Training Center on its 50th Anniversary 1917 -
1967." Rantoul, IL: Crown Publications.

_____. 1987. "The Seventy Year History of Chanute Air
Force Base: 1917 - 1987." Chanute Air Force Base, IL: Office
of History.

E. Likely sources not yet investigated: None

F. Supplemental material: None

PART IV. PROJECT INFORMATION

Federal Agency: Tri-Services Cultural Resources Research Center
(TSCRRC)
U.S. Army Construction Engineering Research
Laboratories

Project Name: Manual for Documenting Historic Military
Structures

Records Preparation Dates: 1990-1992

RED CROSS COMPLEX
HABS NO. IL-1161 (page 11)

Prepared by:

Historic Context researched and written by Susan Enscoe
(TSCRRC);

Architectural Statement researched by Robb McKay (TSCRRC) and
written by Robb McKay and Mira Metzinger (TSCRRC);

Measured Drawings produced by Richard Hayes (TSCRRC), Jim
Bowman (TSCRRC), and Ring-Ru Lin (TSCRRC);

Archival photography produced by Martin Stupich.

Date: 27 October 1992

HISTORIC AMERICAN BUILDINGS SURVEY

RED CROSS COMPLEX, ADMINISTRATION BUILDING (Building 391)

HABS No. IL-1161-A

A. General Statement:

1. History: Groundbreaking for the Red Cross Administration Building occurred during the last week of November, 1941 (Chanute Field Wings 1941c). Official acceptance and occupation of the building by the Red Cross took place during the last week of February; a dedication ceremony was held Sunday, March 15, 1942 (Chanute Field Wings 1942b; 1942d). Based on a 1943 Corps of Engineers drawing (IL-1161-A-13), the main entrance doors were replaced sometime after this date (U.S. Engineer Office 1943). The building was re-sided in 1978, with 1"x12" hard board siding replacing the original 1"x8" shiplap siding. Also at this time, metal gutters and downspouts were added. Raked molding was removed from the cornice and also from the window heads of the center section of the building (verified by ghosts in the paint and 1943 COE drawing). A handicap ramp and landing were added to the west side of the building in the early 1980s. The apartment kitchen and bathroom were remodeled in 1988 by updating appliances, fixtures, and cupboards. The bathroom window was removed and filled in at this time. The heating, cooling, and ventilation systems have been upgraded over time (date unknown).
2. Architectural Character: The Administration Building retains its original appearance to a degree not commonly seen in extant World War II temporary buildings. An uncredited architect's drawing was included in a base newspaper article announcing the construction of the facility, and appears nearly identical to the building as it stands today (Chanute Field Wings 1941b). It was described in 1941 as a "southern colonial style frame structure," that cost \$21,775, and contained "offices, consultation rooms, a reception room, classroom, and quarters for the field director" (Chanute Field Wings 1941b; 1941c). Differing from most temporary structures of its era, it features the use of decorative moldings on the building's interior and exterior. Mill work on the building takes the form of window hoods, continuous exterior and interior cornices, and interior finish at the

RED CROSS COMPLEX
ADMINISTRATION BUILDING
(Building 391)
HABS NO. IL-1161 (page 2)

windows and doors. The building's other outstanding feature is concealed within the wall separating the reception room from the class room; this entire wall is a wood frame truss serving the dual purpose of vertical roof support and lateral shear wall.

B. Description of Exterior:

1. Overall Dimensions: The Red Cross Building is itself cross-shaped and composed of three masses measuring 90'-6" in length (north-south) at the longest point, and 37'-6" wide (east-west) at the widest point. Bisecting the building mass into two equal wings is the two-story main portion of the building. The main area measures 37'-6" long (east-west) by 25'-10" wide (north-south). On the west elevation of the building, the main section extends 6'-8" beyond the plane of the lower wings. On the east elevation the projection is decreased to 2'-0", while an 11'-9" porch is added. The lower, one-story portions of the building have identical dimensions measuring 32'-4" long (north-south) by 28'-10" wide (east-west). The entire building sits on a partially exposed basement giving the main area a ridge height of 25'-6" above grade, while the wings' ridges reach only 17'-6" above grade. Differences in window and door placement, use of moldings, and porches produce four distinct elevations.

The north elevation (Photo IL-1161-A-6, Drawing IL-1161-A, Sheet #3) is marked by four matching windows, three of which are located symmetrically about the central axis of the north wing. To the west, the fourth unit is centered in the 8'-6" extension of the main area, while to the east the mass of the entry porch slightly overbalances the elevation.

The east elevation (Photo IL-1161-A-1, Drawing IL-1161-A, Sheet #3) is composed of two wings with three windows each, and the main entry is set under a two-story porch consisting of four 1'-2"x1'-2" columns spaced evenly across the width of the main portion of the building. Between the columns, at the first floor level, are a set of double doors and two windows. The doors are centered between the middle two columns, and are capped with a five pane top-light and raking cornice. Flanking the doors are two typical windows with

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raking cornices. At the second story level, there are three smaller square windows centered between the columns and tight to the porch ceiling. The columns support a full entablature and pediment with a 2'-6" diameter compass-window style attic vent centered in the pediment.

The south elevation (Photo IL-1161-A-3, Drawing IL-1161-A, Sheet #4) is much the same as the north, although with different windows at the end of the wing. Rather than typical windows this elevation has two sets of double windows. The sets themselves also differ as the easterly set is a pair of typical sashes, while the westerly set are substantially smaller. The tops of the windows are in the same plane, but the whole composition is shifted to the west. The window in the main area extension to the west is also present on this elevation.

The west elevation (Photo IL-1161-A-4, Drawing IL-1161-A, Sheet #4) is the least regular, for while it maintains the massing of the east elevation, the arrangement of openings is very different. Here the north wing is divided roughly into fourths by three typical windows. Abutting the southernmost window is a single door leading to the general office area. The main section of this elevation is identical to the east elevation (without the doors and the porch). The double doors have been replaced with a typical window, and the raking cornices have been removed from all the windows. The south wing is broken by two windows and a door, with the windows at either end of the wing and the door just south of the wing's center line. Before kitchen and bathroom remodeling in 1988, there was a window immediately to the north of the door (Drawing IL-1161-A, Sheet #4). Above the door is a small hip roofed portico, which fits between the top of the door and the eave (Photo IL-1161-A-8). The chimney is also located in this area, north of the wing's center line, and reaches a height of 13'-0" above the ridge.

2. Foundations: The foundation is divided into four areas, three crawl spaces, and a section of full basement which gives access to the crawl spaces (Drawing IL-1161-A, Sheet #1). The largest crawl spaces occur under the main and north

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section of the building, with a small crawl space at the south end of the south wing. The majority of the foundation is 8" cast-in-place concrete on 16" wide trench footings; the exception to this occurs in the basement area where 12" walls were used on 24" wide trench footings. A system of 5½" vertical plank formwork was used throughout the building as evidenced in the basement area and crawl spaces. The intermediate columns in all areas rest on circular piers.

3. Wall Construction: The perimeter walls are platform construction using 2"x4" studs 2'-0" on center (Drawing IL-1161-A, Sheet #6). 1"x12" sheeting was used on the entire building and originally covered with a black felt vapor barrier and 1"x8" shiplap siding (now replaced with 1"x12" hard board siding). All corners are flashed with approximately 2" wide light gauge (18 Ga. or 20 Ga.) galvanized steel strips.
4. Structural System, Framing: The Red Cross Building uses platform frame construction (Drawing IL-1161-A, Sheet #6). The walls are typically framed from 2"x4" studs at 2'-0" on center. Windows are supported on a single 2"x4" at the sill with a double 2"x4" plate at the head. The platform is made of 2"x10" joists at 16" on center, supported on 6"x10" intermediate (sleeper) beams. In the north wing and the main area platforms, the floor joists span one-third of the area's length rather than the more standard ½ the width. The platform bears on ledges cast in the foundation walls, and is topped with 1" random width tongue and groove subflooring, laid diagonally, covered with ¾"x¾" oak tongue and groove finish flooring. The roof platform is 2"x10" rafters supported by a 1"x10' ridge board and a double 2"x4" plate at the perimeter. The deck is 1" random width sheathing covered with asphalt shingles. In order to provide the desired clear span in the reception and class rooms, and to bridge the 18'-0" door which opens the two rooms to each other, an elaborate built-up truss carries the roof loads to the foundation (Drawing IL-1161-A, Sheet #6). The truss acts as a shear wall tying the two wings together, and is built of a combination of 2"x4"s, 2"x6"s, and 2"x10"s.

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5. Porches, Balconies: There is one original and one later porch on the building. The eastern entry porch is original, and consists of a 26'-4"x11'-9" concrete slab raised 12" to 14" (two steps) above the surrounding grade (Drawings IL-1161-A, Sheets #2,3). The steps are centered on the porch's 26'-4" side, between the two center columns. The four identical 1'-2" square columns support the pedimented gable roof which covers the porch and the main section of the building. An interesting feature of the porch is the red cross engraved in the center of the floor. Measuring 36" square, the block cross is outlined by a 1/8" deep tool joint let into the floor surface and the area bounded by this joint is painted red. The Red Cross insignia can also be found above the double doors where a simple wood cutout, painted red, is centered between the doors' cornice and the second story window above.

In the early 1980s, a ramp was added to the west side which tracks from the garage and parking area to a 38" x 72" landing at the single door leading to the general office (Photo IL-1161-A-4). The ramp is 38" wide, 12'-0" long, with a site fabricated hand rail of redwood stained 2"x4"s supported by 2 1/2" diameter galvanized pipes.

6. Chimney: The building has one brick chimney, located near the center line of the south wing (Photo IL-1161-A-3, Drawing IL-1161-A, Sheet #4). The chimney exits the wing's roof 2'-0" west of the ridge. A 1'-0" high galvanized sheet metal flashing was used to waterproof the stack. At some time the original chimney, approximately 2'-0" square and rising 3'-0" above the ridge, was modified by the addition of two sections. A 3'-0" portion which matches the original cross section was added, then approximately 6'-0" of 18" square flue was added, bringing the chimney to a height of 30'-0" above grade.

7. Openings:

- a. Doorways and Doors: There is one set of double doors servicing the reception room, one for the general office

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area, and one for the apartment. The main entrance through the double doors has been modified as the five pane top-light and moderately elaborate cornice molding are all that remain of the original entry (Drawing IL-1161-A, Sheet #7). The building originally had doors with much larger nine pane lights (estimated at about 3'-0"x4'-0"). These doors were observed in a 1943 photo displayed at the time of our inspection, however, oddly enough the doors in the photo do not match the doors shown on the original elevation drawings. All other entrances to the building are single doors with one standard door used throughout. Measuring 2'-8"x6'-8", the door has a 1'-8"x3'-0" single pane light and a 1'-8"x1'-10" wainscot at the bottom. All have been fitted with screen doors; those leading to the reception room and the general office are wooden (probably not original), and the screen door on the apartment entrance is a modern metal unit.

b. Windows: The windows (Drawing IL-1161-A, Sheet #7) are primarily 6 over 6 double hung wood sash units that measure 3'-6"x6'-0". There is evidence that windows in the main area had raking cornices when the structure was built, but they have been removed. In 1988, the window in the apartment bath room was removed and filled in. The south end of the building is the only location where the double hung window pattern changes, and two major differences are found here as the units are hung in pairs, and one set varies in size from the typical sashes. The pair of windows on the southwest corner of the south end of the apartment are smaller than the other windows with each of the sashes measuring 2'-10"x4'-4"; the pattern of 6 over 6 lights is maintained. Like the original front doors, these windows are inconsistent with the 1943 COE drawing as the pairing of units is shown but no reduction in size is indicated. In the reception room and class room, 6 pane center pivot wood sashes, measuring 3'-0"x3'-0", were used at the second story level. There are six of these windows, three in each room, symmetrically arranged about the room's center line. The basement has a six pane wooden casement window located in a large well on the west side of the building which opens to the inside. At some time the window was rehung and the hinges were moved from the right side of the frame to the left side. Of note is the use of finish moldings around the inside of all the windows, as

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this is not a common detail to buildings of this type and time period.

8. Roof:

a. Shape, Covering: All three sections of the roof are moderate slope Gables (Photo IL-1161-A-3). The roof system uses 2"x8" rafters with 1" random width sheathing, and is covered with red three tab asphalt shingles.

b. Cornice, Eaves: The building originally had a moderately elaborate cornice under a deep eave. Two levels of mill work made up the original cornice, which ran the entire perimeter of each section of the building. The same profile mill work was used under the eaves and in the pediments as well. During the 1978 re-siding all of this mill work was removed and replaced with flat fascia. Also at this time the eaves were cut back to accommodate the installation of metal gutters and down spouts.

c. Dormers, Cupolas, Towers: None.

C. Description of Interior:

1. Floor Plans:

a. Basement Plan: The Basement is two rooms (Drawing IL-1161-A, Sheet #1). The large room is 26'-10" long by 21'-6" wide and contains the smaller coal room. The coal room is 7'-6" wide by 10'-6" long, and is 2"x4" stud construction sheathed with 1"x6" tongue and groove boards. Because of its proximity to the furnace, a 4'-0" wainscot of concrete-asbestos paneling was added. This room is not shown on the original plans, nor is the coal chute which leads into it on the elevations. The stairs and the store room are located in the south west corner of the large room. Aside from the stairs, there are two exits from the basement both of which lead into crawl spaces. One hatch is in the south wall, 7'-0" from the east wall and the other is in the north wall, 8'-0" from the east wall. The building's furnaces and water heater are located near the center of the large room. Also

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located in the basement is a double well, metal lined, concrete wash sink. This sink appears to be original but no manufacturer or date could be found on it.

b. First Floor Plan: The floor plan (Drawing IL-1161-A, Sheet #2) is divided into three areas: administration in the north wing, reception room and class room in the main area, and the field director's apartment in the south wing. The administration area is divided into four offices and a storage room. The general office (Photo IL-1161-A-10, Drawings IL-1161-A, Sheets #2,5) occupies the southern third of the wing and opens into the reception room through a 12'-6" wide flat arch. According to the 1943 COE drawing (Photo IL-1161-A-13), there was originally a railing separating the two rooms. There is a standard door from the general office to the class room. Leading north from the general office is a hallway which divides the remainder of the wing in half. On the east side of the hall are two approximately equal size offices each with a window in its south east corner. West of the hall are the storage room and another office. Occupying the south-east quarter of the storage room is a shower room. This room is accessible through a door in the hall or through a window between it and the storage room that provided ventilation for the shower.

The main portion of the building is divided between the equally sized reception room and the class room which are separated by the truss wall (Photos IL-1161-A-9, IL-1161-A-11, and IL-1161-A-12, Drawings IL-1161-A, Sheets #2,5). Originally the rooms could be closed off with sliding doors, but these wooden doors have been replaced by an accordion style plastic unit. During inspection of the building and grounds the original doors were found in the garage in good condition, but without their hardware. The sliding wall seems to have consisted of eight doors of two different widths (two 15" wide wing doors and six 31" wide units). Three doors lead south from the reception room; two access the public washrooms, the third leads to the apartment.

The apartment is divided by a hall running north-south (Drawings IL-1161-A, Sheets #2,5). To the east and west of this hall are two smaller rooms and the bath room. The rooms

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are of equal size, and each has a closet and a single window. Located in the south-east corner of the wing is the largest room, with three windows and two closets. The door leading into the kitchen is in the center of this room's west wall. The kitchen and the stairs to the basement occupy the remainder of the wing. The kitchen itself has three windows, a pair over the sink on the south wall, and one in the west wall. The north wall door leads to the stair landing which also serves as the entry for the unit. In 1988 both the kitchen and bath room were remodeled, primarily by updating appliances, fixtures, and cupboards, with little change in plan except the removal of the bathroom window.

2. Stairways: There is only one internal stairway; it leads from the apartment kitchen to the basement (Drawings IL-1161-A, Sheets #2,5). It is of wood construction consisting of 12, 2"x10" open treads supported on 2"x10" stringers. When the coal room was added, 1"x6" sheathing was tacked to the back of the upper half of the stairs.
3. Flooring: Oak tongue and groove flooring was used throughout the building (Photo IL-1161-A-9). In the reception room, office hallway, general office, and shower room the wood flooring is still exposed and is in moderately good condition. In the private offices, the class room, and the apartment carpet has been installed (Photos IL-1161-A-10, and IL-1161-A-12). In the public washrooms, and the apartment kitchen and bath, linoleum tile was laid over the wooden flooring. In the public rest rooms green and black marbled tile was used. This is probably what was used in all tiled areas originally, but during the 1988 remodeling the apartment kitchen and bath were changed to tan speckled tile.
4. Wall and Ceiling Finish: Throughout the public portions of the building a standard finishing scheme was used. The lower 4'-0" of the walls are a smooth fiber board wainscot. Above the wainscot 1'-4"x8'-0" strips of fiber board were used. The board has a pattern of vertical reveals which are intended to hide the joint between the sheets themselves as well as enliven otherwise dull walls. The pattern is a

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single reveal, 1½" from either edge of the sheets which appear to have a tongue and groove edge system allowing the joints to occur slightly off the center line of the supporting studs. In the reception and class rooms where the ceiling is taller, a picture rail was used to hide the joint between the fill sheets and the filler piece which finishes the walls. In all the rooms a millwork cornice was used at the top of the wall. All ceilings are a 16"x32" fiber board tile. Evidence exists in several areas that the nailing system used to hold the tiles in place has failed. Both walls and ceiling are painted pastel tones. Two decorating modifications have occurred. First, in the class room and general office areas the wainscot has been covered with dark brown simulated wood grain paneling (Photo IL-1161-A-12). Second, the entire ceiling of the north east office has been replaced with 4'-0"x8'-0" of fiber board held in place by 1"x3" battens.

5. Openings:

a. Doorways and Doors: There are three styles of panel doors present, with a standard two panel arrangement being most common. This door was used at all but three locations. The door into the shower room, and the door between the general office and the hallway, have louvers in place of a lower wainscot. The door which leads into the apartment is a five panel door with equally sized, horizontally set panels. The entire composition is slightly above center.

b. Windows: One set of interior windows was present in the building. Located in the administrative storage room, they served as ventilation for the shower room. The window is a pair of single pane casement windows hinged into the storage room. The hinges and center latch appear to be original. A slide bolt was added to the left hand casement at a later date. Opaque textured glass was used in these windows.

6. Decorative Features and Trim: The use of decorative trim is unusual for the time. Typical temporary military buildings from this period evince the heavy emphasis placed on the conservation of materials, usually requiring the elimination of all decorative details. Building 391 breaks this pattern

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with decorative moldings both on its exterior and interior (Drawings IL-1161-A, Sheets #5,7). On the interior, four basic molding profiles were used (Photo IL-1161-A-11). A standard 5" top beaded base board was used throughout the building, with a piece of quarter round trimming the base board at the floor line. At the top of the wainscot, a 2" high fascia with small quirk beads top and bottom was used to hide the seam between the two types of wall board used. In the reception and class rooms, with a taller ceiling, an intermediate picture rail was needed and a simple ¾" high half round was used. The ceiling cornice and window and door frames possess an identical profile - a low relief ogee with a ¾" squared top edge. The most elaborate molding used is found under the window sill and is a combination of ovolo and cove with a ¾" top fillet.

7. Hardware: All the door and window hardware appears to be original with no especially interesting features.

8. Mechanical Equipment:

a. Heating, Air Conditioning, Ventilation: The fact that the building now uses two oil fired Cleveland, Dornback furnaces and has a coal room is proof that the H.V.A.C. system is not original. The large patch in the base of the chimney also supports this conclusion.

b. Lighting: The original fixtures are partially intact, with the globes and incandescent bulbs removed and fluorescent tube fixtures added. The update was accomplished by suspending the new fixtures on chains hung on hooks in the ceiling, and simply plugging the new units into the old sockets (Photo IL-1161-A-10). There are two original light fixtures left in the building, both in the public rest rooms. They have white ceramic squares built up in three concentric tiers, with an elliptical frosted globe open on the bottom to allow access to the bulb.

c. Plumbing: There are no signs of major plumbing changes. Aside from such minor changes as replacement of faucets and some control valves under the sinks the original piping is

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intact. All but one fixture in the public rest rooms are original. Both sinks are the wall hung type manufactured by the U.S. Co., and each bears the date 1941. The men's room stool is the only original unit left in the building. It appears to come from the Gerber Co., and be a model K57. The fill tube and float in the unit have been replaced. The stool in the women's rest room was replaced some time after 1972 with a Mansfield of unknown model.

d. Fixtures: The only other original fixtures also occur in the public rest rooms and consist of one of the following in each rest room: two National towel dispensers, two 2 hook chrome coat hooks, two wall mounted chrome soap dishes, and two round topped mirrors; no chrome fixture had a manufacturer's mark. There were two additional original bath fixtures: a wall mounted glass holder in the women's room, and the toilet paper holder in the men's room. Most interesting are the mirrors; each is 10" wide and 17½" tall at the top of the arch. 1½" down from the top edge, and centered in the middle, is an etched flower and vines. The flower has six petals with a hexagonal center and measures 2" across. On either side of the flower are vines which curve toward the bottom parallel to the arch of the top. Each vine is 4" long and consists of a segmental stem and twelve leaves.

9. Original Furnishings: There is a moderate collection of original furniture remaining, including: 4 single drawer tables, 6 seven drawer desks, 1 three drawer typing stand, 1 four drawer card file, 2 coat racks, 3 letter bins, 2 rolling desk chairs with arms, 1 without arms, 2 straight backed chairs, 6 dining type chairs, 1 deck chair and 2 cabinets, one with legs and one without (Photos IL-1161-A-9, IL-1161-A-10, IL-1161-A-11, and IL-1161-A-12). All pieces seem to have come from the Missouri Furniture Co., St. Louis, evidenced by affixed stamps and tags. Also original are 7 Shaw-Walker five drawer file cabinets, and a Safe Manufacturers National Association floor safe.

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HABS NO. IL-1161 (page 13)

Prepared by: Robb McKay and Mira Metzinger

Title: Architect

Affiliation: Tri-Services Cultural Resources Research Center
U.S. Army Construction Engineering Research
Laboratory

Date: August 1990, October 1992

HISTORIC AMERICAN BUILDINGS SURVEY

RED CROSS COMPLEX, GARAGE (Building 392)

HABS No. IL-1161-B

A. General Statement:

1. History: The Garage dates to 1941 and was built concurrently with the Administration Building. It was re-sided in 1978.
2. Architectural Character: The Garage is located approximately 40 feet to the west and slightly south of the Administration Building. It is three bays in width and one bay in depth. (See photographic documentation HABS No. IL-1161-B-1 and HABS No. IL-1161-B-2, and also drawing IL-1161-B, Sheet #1).
3. The building is in good condition.

B. Description of Exterior:

1. Overall Dimensions: The Garage measures 32'-3" wide and 21'-3" deep, and had a ridge height of 15' above grade. The north and south elevations are identical and each have a single centered nine pane window. The west elevation is composed of three symmetrically spaced identical nine pane windows, while the east elevation contains the three garage bay doors.
2. Foundations: The foundation is concrete slab on grade.
3. Walls: The Garage has stud walls with 5¼ tongue and groove boards. 10" lap siding has been placed on top.
4. Structural System, Framing: Light frame construction, with studs spaced 16" on center. Roof trusses consist of two rafters, one joist, and three posts.
5. Openings: Garage openings are composed of three wooden 8' overhead doors with wood battens and five lights each.
6. Roof: Medium pitch gable, three tab asphalt shingles.

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Red Cross Complex

HABS No. IL-1161

Southwest corner of Eagle and Borman Drives

Chanute Air Force Base

Rantoul

Champaign County

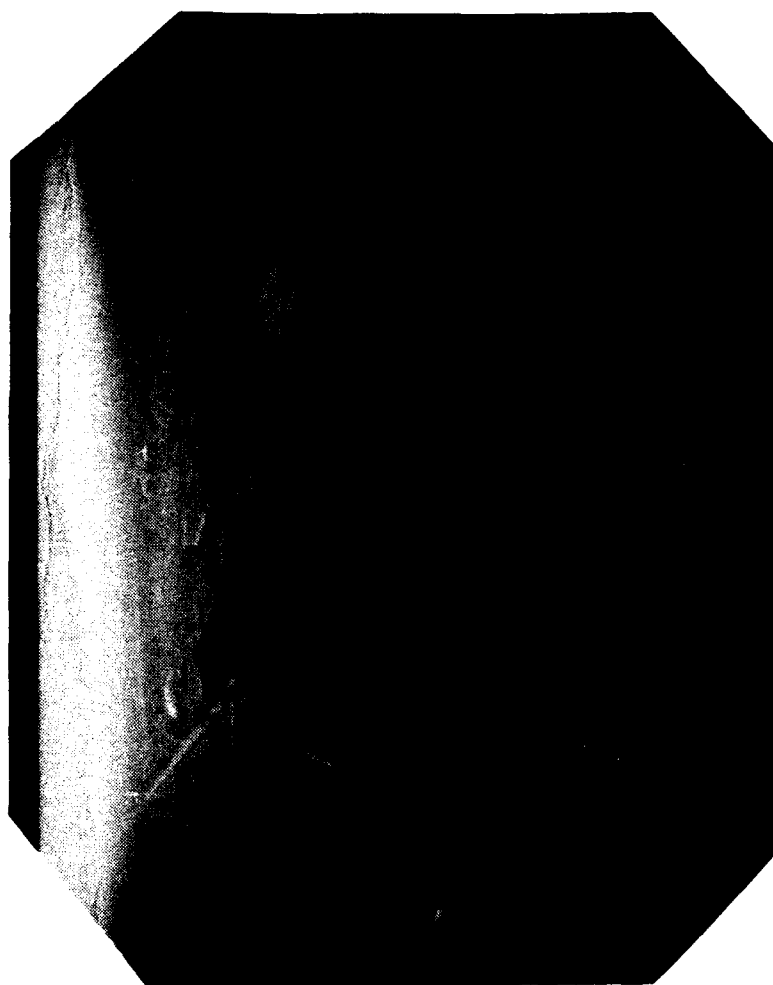
Illinois

Martin Stupich, Photographer, December 1990

IL-1161-1	AERIAL VIEW TO SSW WITH RED CROSS SITE IN CENTER
IL-1161-2	AERIAL VIEW TO WEST SHOWING RED CROSS COMPLEX SITE
IL-1161-3	AERIAL VIEW TO NORTH SHOWING RED CROSS COMPLEX SITE
IL-1161-4	AERIAL VIEW TO EAST SHOWING RED CROSS COMPLEX SITE
IL-1161-5	AERIAL VIEW TO WSW SHOWING RED CROSS COMPLEX SITE
IL-1161-6	DISTANT OBLIQUE VIEW TO SOUTH-EAST OF WEST REAR

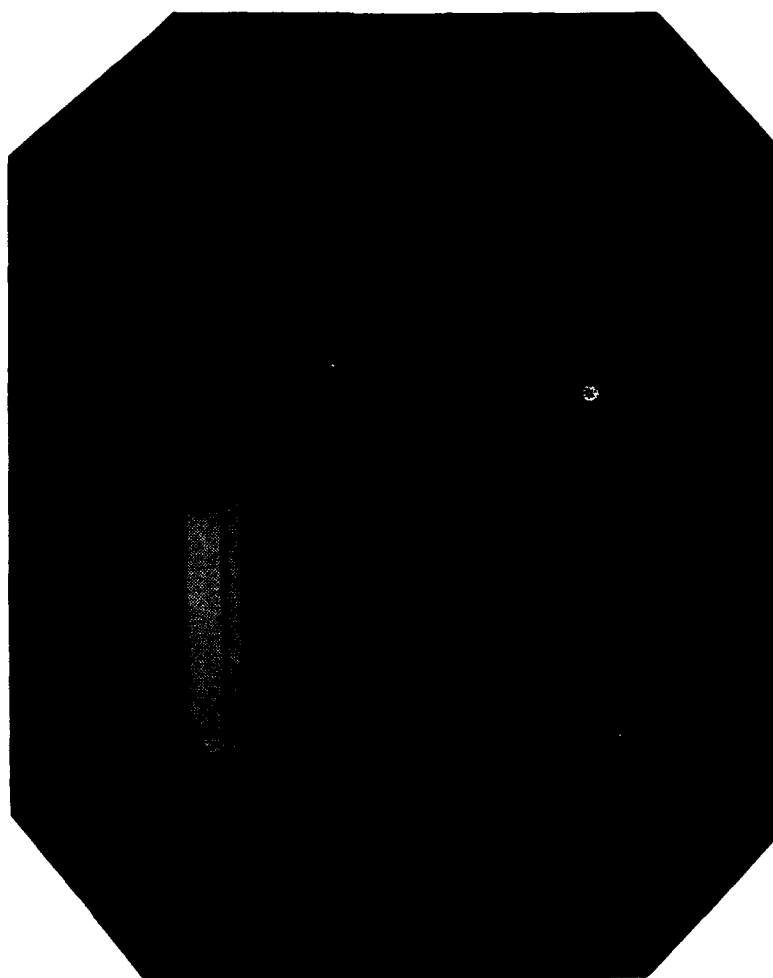
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HABS No. IL-1161-1



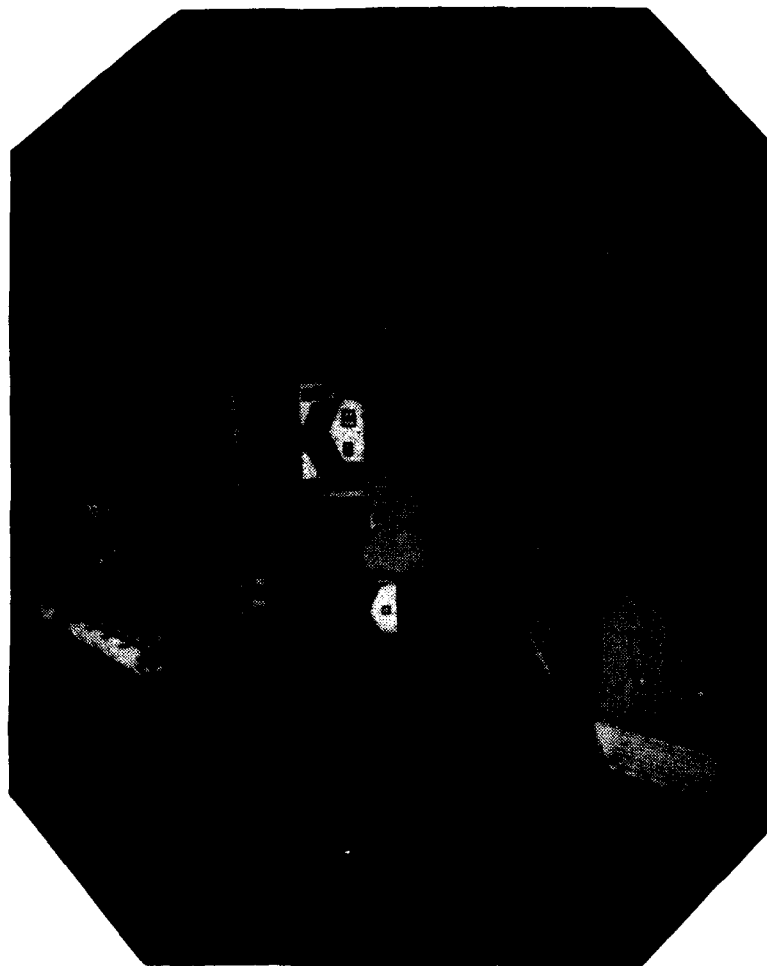
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HABS No. IL-1161-3



HISTORIC AMERICAN BUILDINGS SURVEY
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HABS No. IL-1161-4



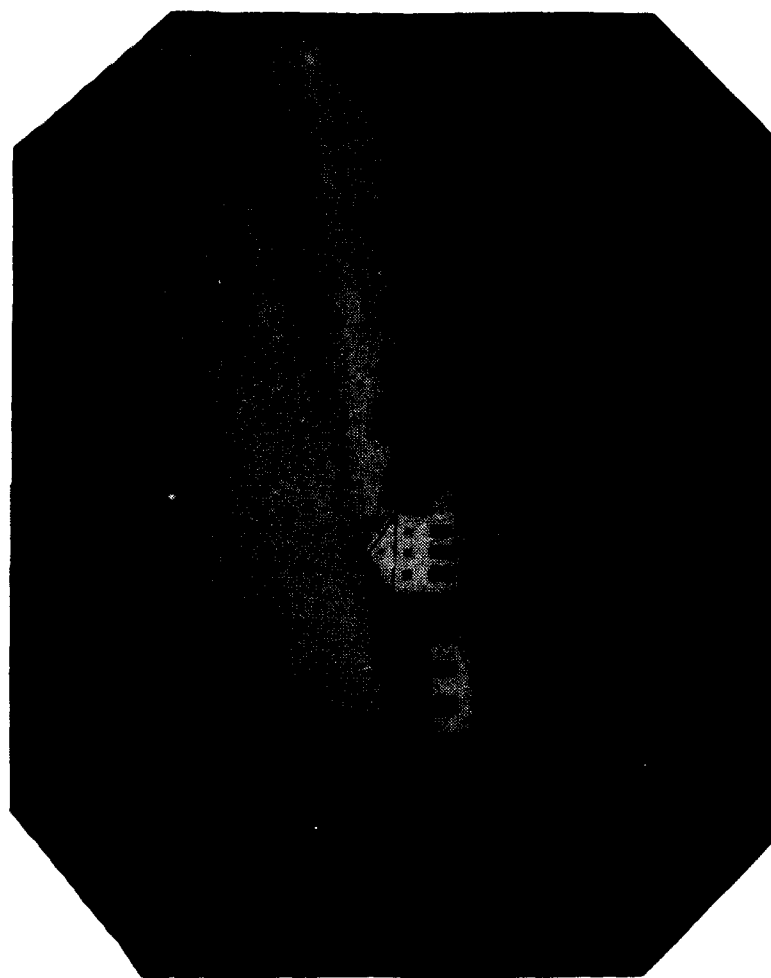
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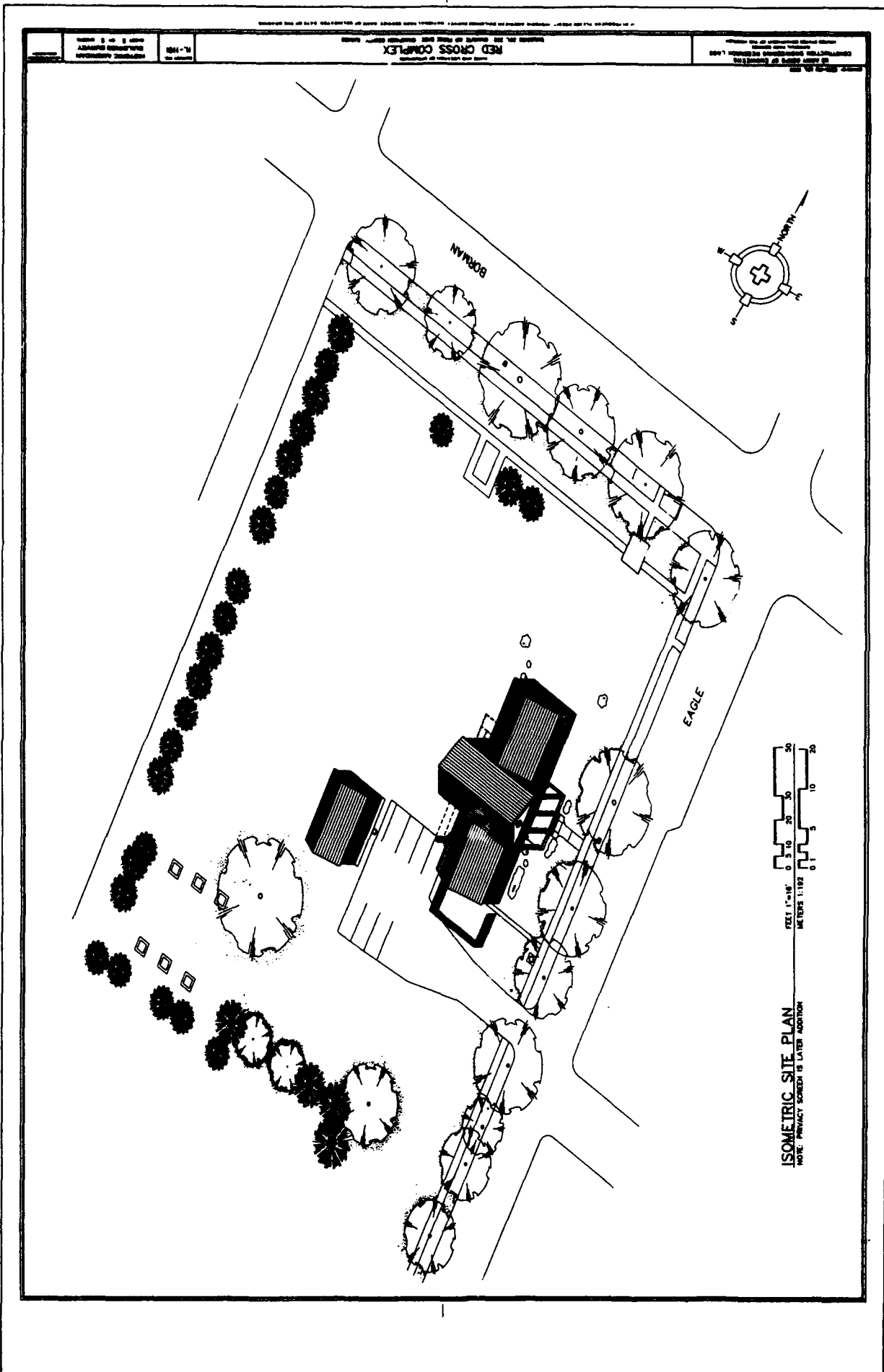
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HABS No. IL-1161-6





Red Cross Complex,
Administration Building (Building 391)
Southwest Corner of Eagle and Borman Drives
Chanute Air Force Base
Rantoul
Champaign County
Illinois

HABS No. IL-1161-A

PHOTOGRAPHS

Historic American Buildings Survey
National Park Service
Rocky Mountain Regional Office
Department of the Interior
12795 W. Alameda Parkway
Denver, Colorado 80225

HISTORIC AMERICAN BUILDINGS SURVEY

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Martin Stupich, Photographer, December 1990

- IL-1161-A-1 VIEW OF EAST FRONT
- IL-1161-A-2 OBLIQUE VIEW TO NORTH-WEST SHOWING EAST FRONT
- IL-1161-A-3 VIEW OF SOUTH-WEST CORNER
- IL-1161-A-4 VIEW OF WEST REAR
- IL-1161-A-5 OBLIQUE VIEW TO SOUTH-EAST OF WEST REAR
- IL-1161-A-6 VIEW OF NORTH SIDE
- IL-1161-A-7 VIEW OF NORTH-EAST CORNER
- IL-1161-A-8 DETAIL OF BACK DOOR ON WEST REAR
- IL-1161-A-9 VIEW OF INTERIOR, RECEPTION ROOM
- IL-1161-A-10 DETAIL OF OFFICE FURNITURE, GENERAL OFFICE AREA
- IL-1161-A-11 VIEW OF INTERIOR, LECTURE ROOM
- IL-1161-A-12 DETAIL OF FURNITURE, LECTURE ROOM
- IL-1161-A-13 Photocopy of existing drawing, dated February 12,
1943, drawn by N.B. Popov for the U.S. Engineer
Office, Chicago District Air Corps, Construction.
ELEVATIONS (EAST FRONT, WEST REAR, NORTH SIDE,
SOUTH SIDE)

Note: For additional written historical and descriptive information, please see the main entry for the Red Cross Complex, HABS IL-1161.

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HABS No. IL-1161-A-2



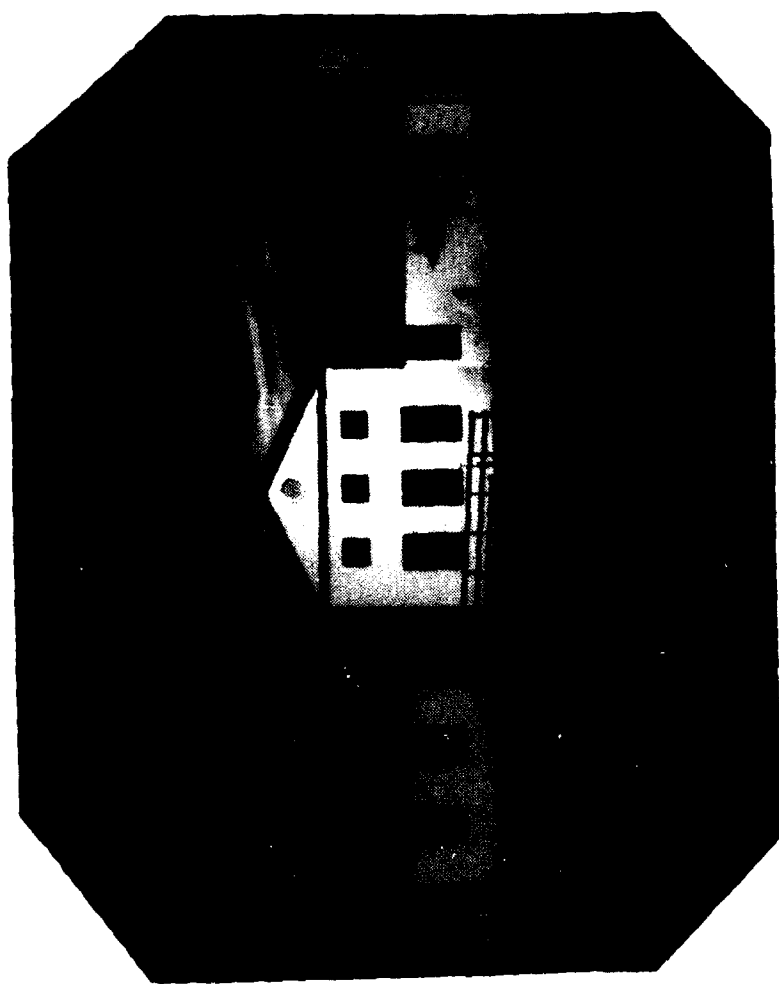
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HABS No. IL-1161-A-3



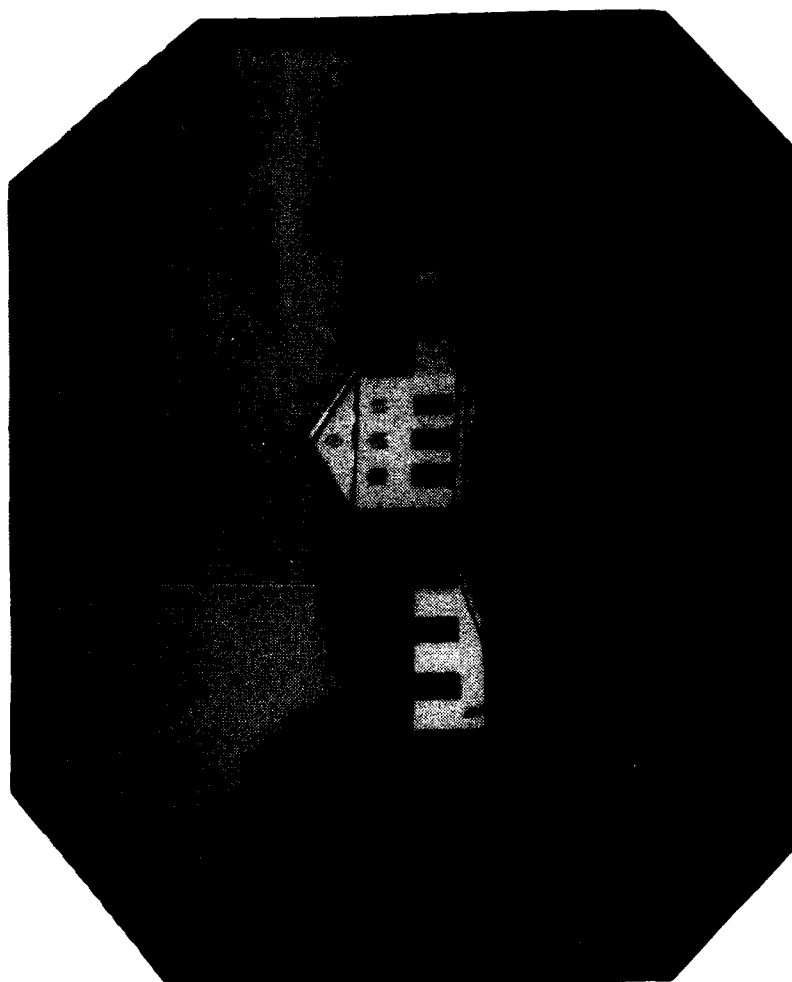
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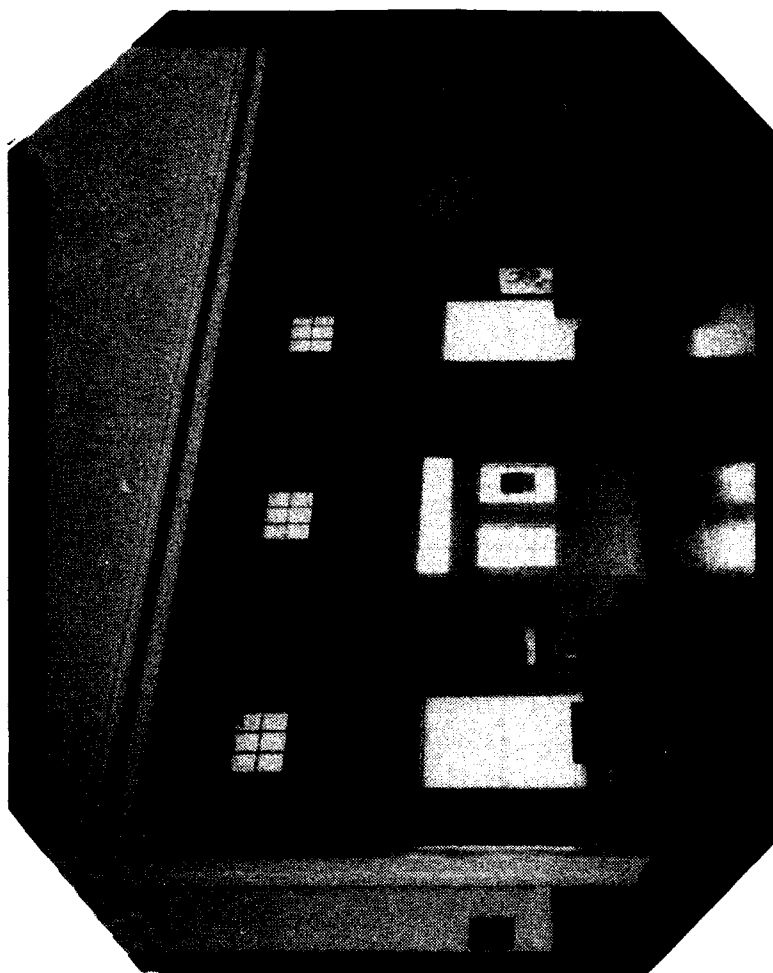
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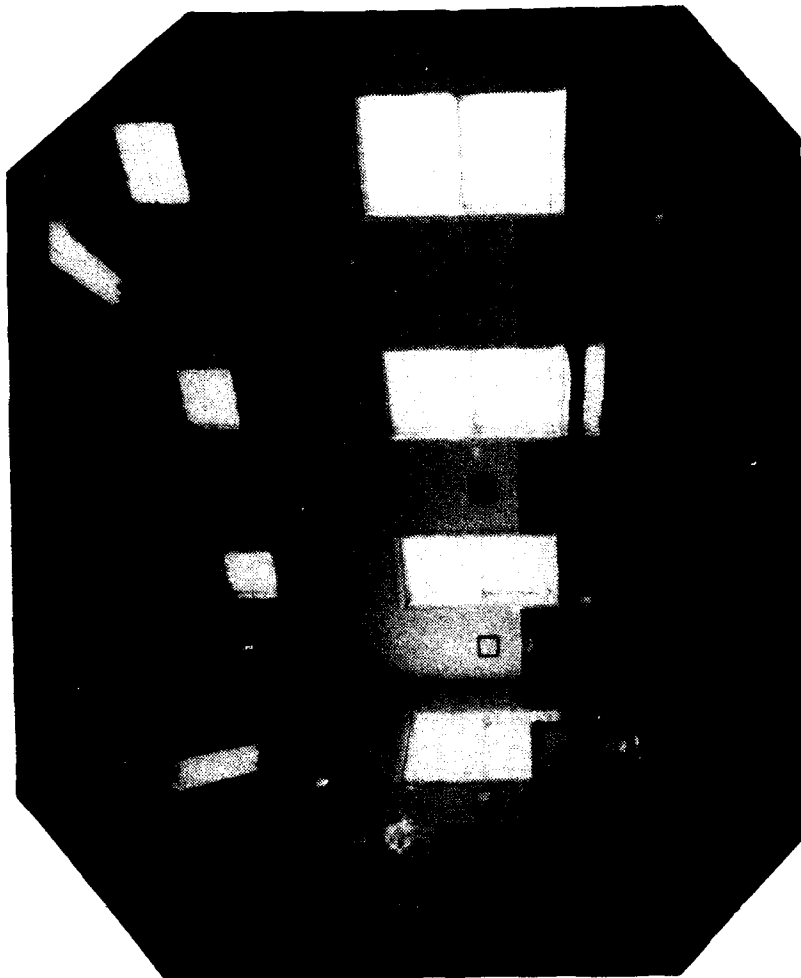
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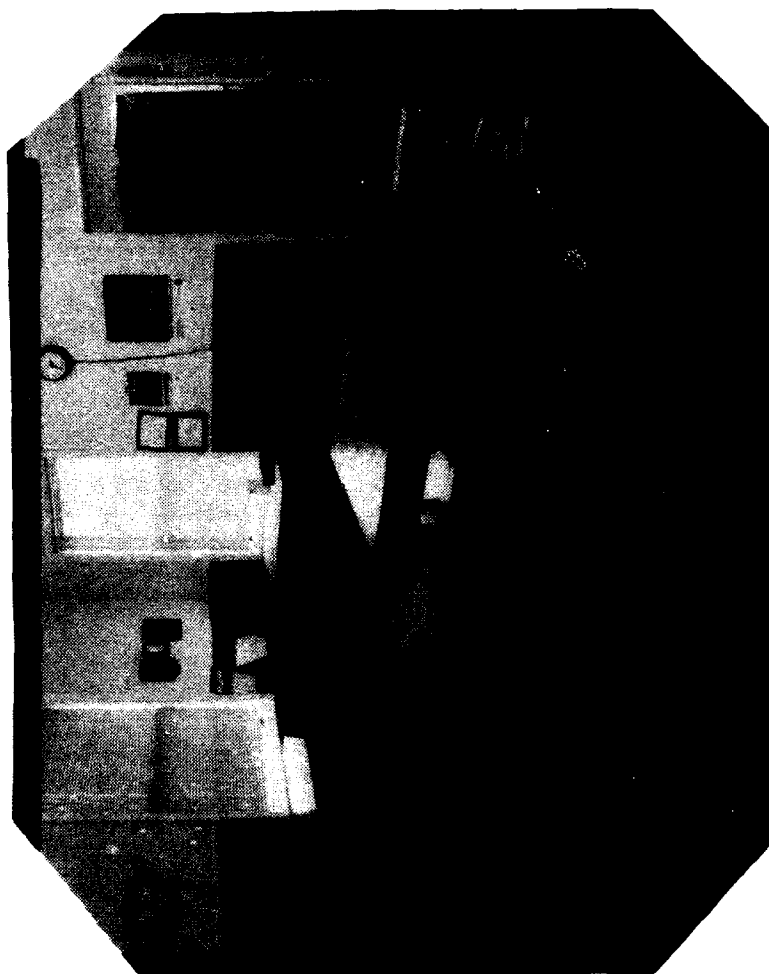
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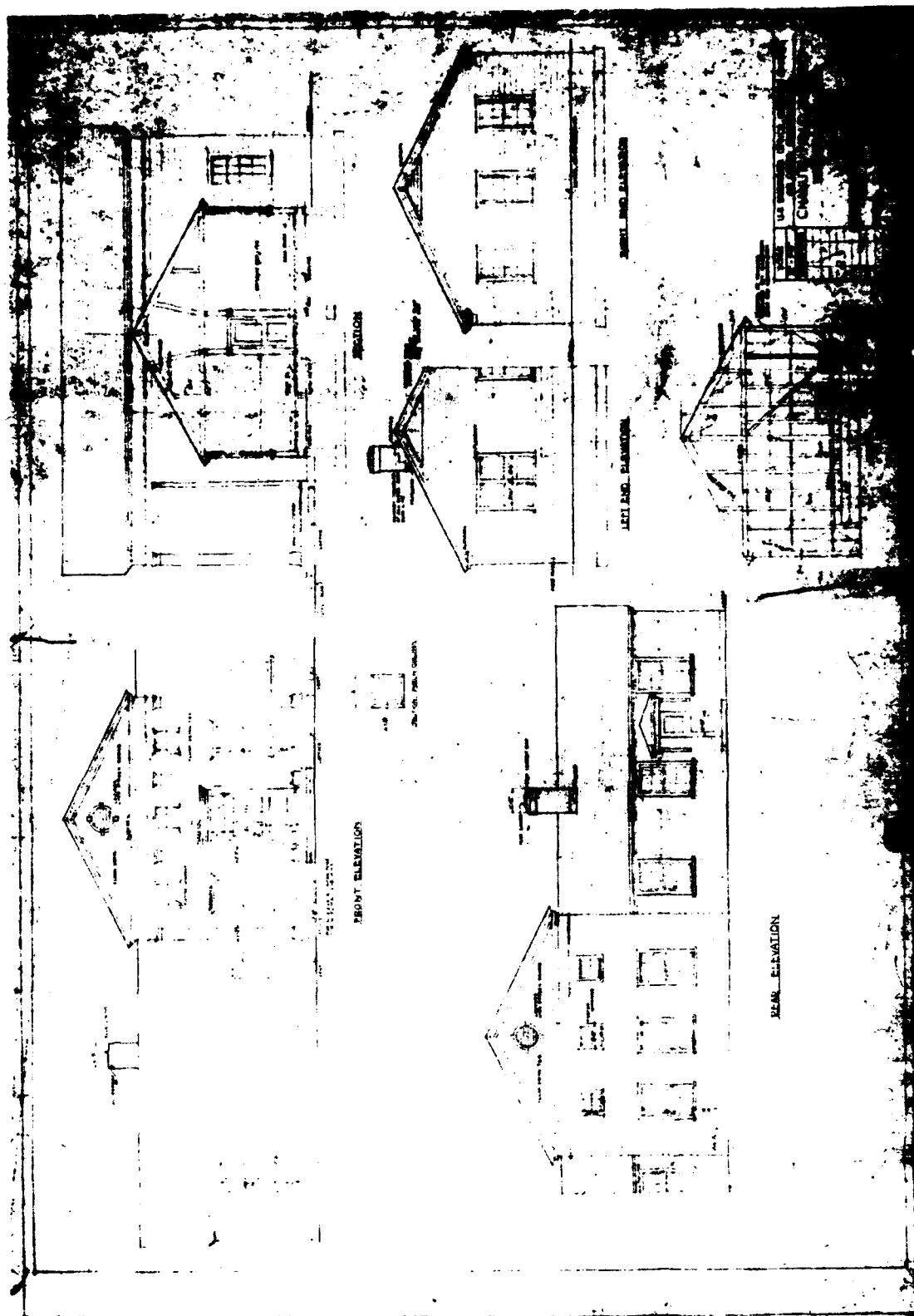
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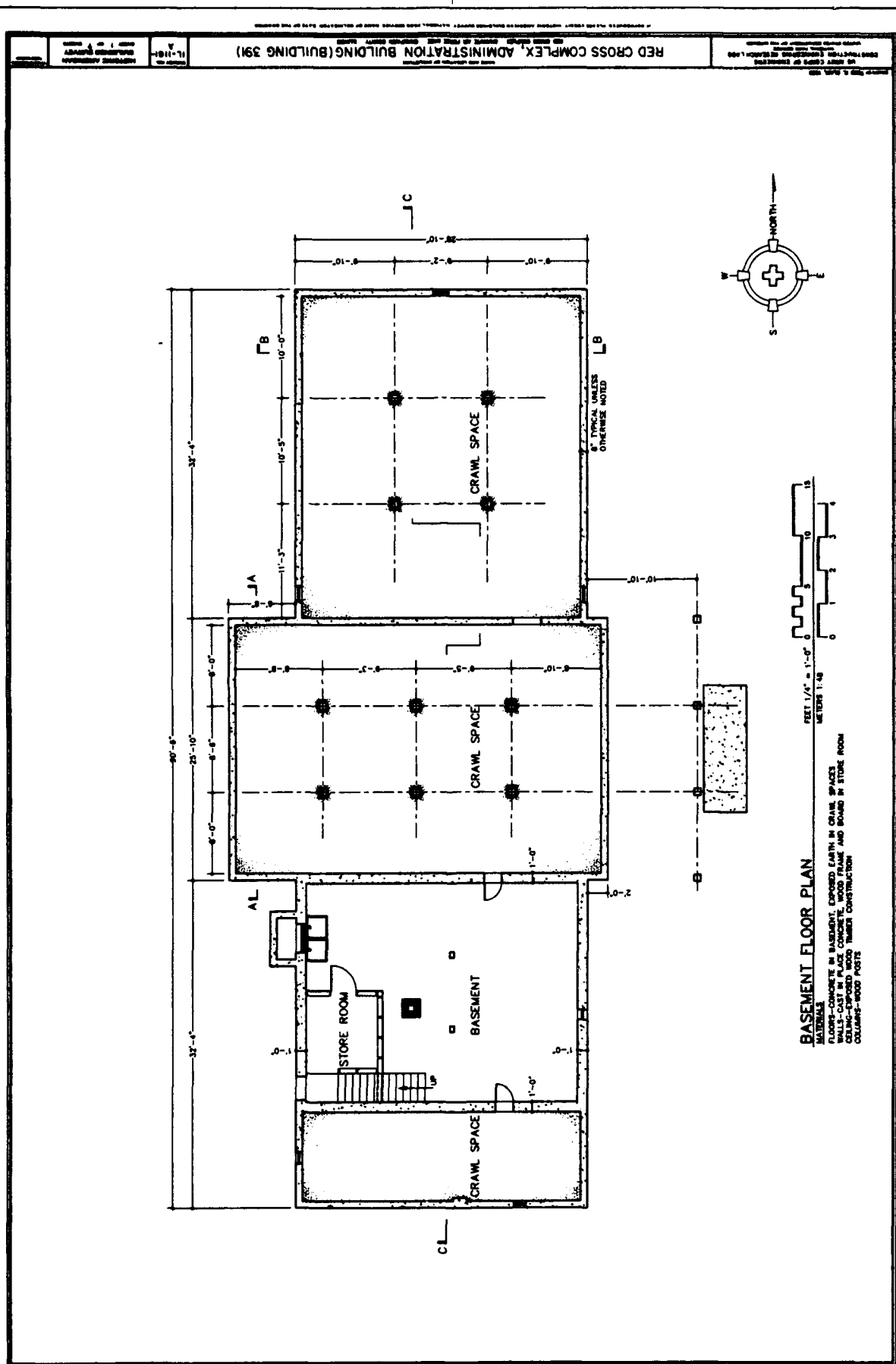


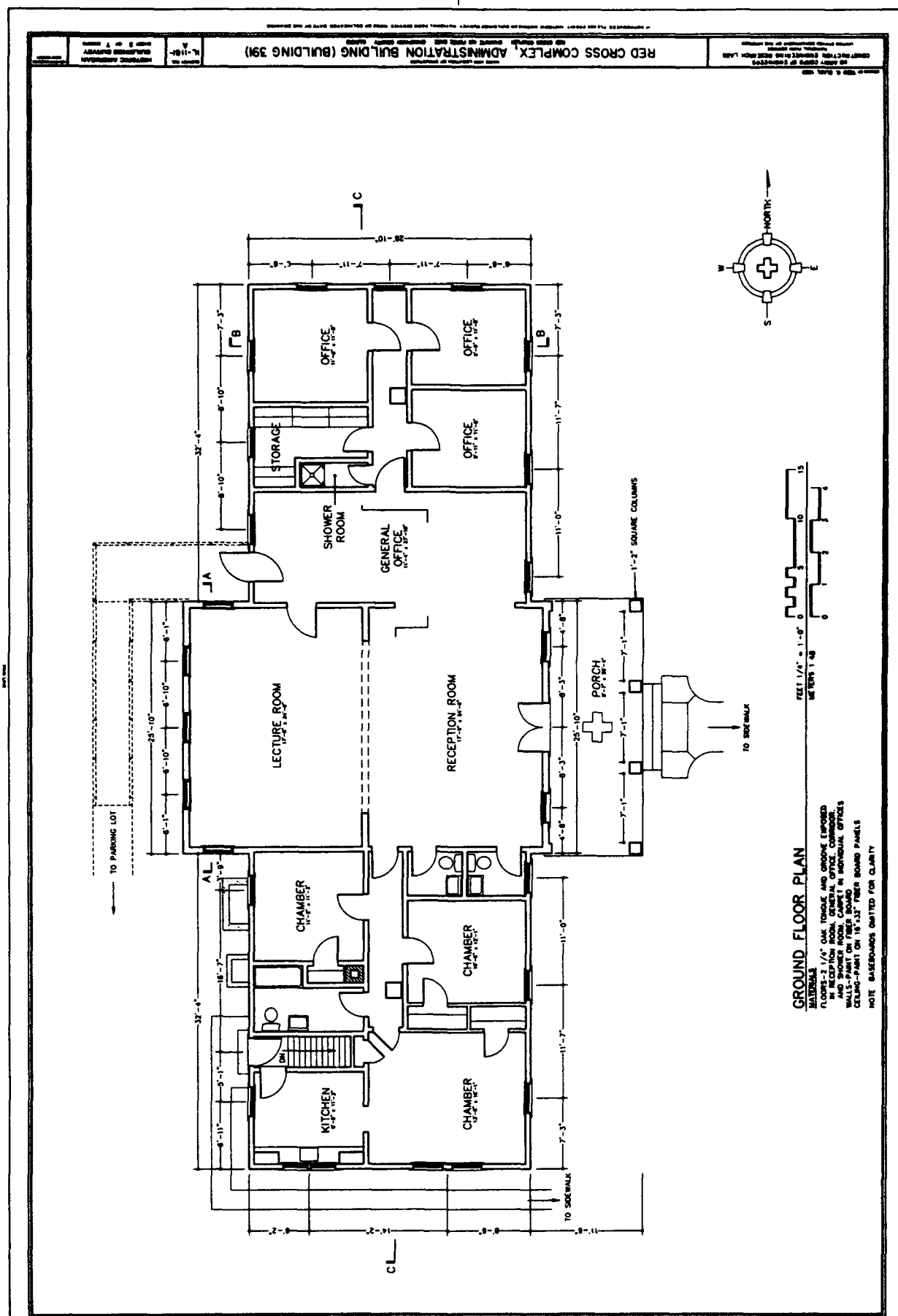
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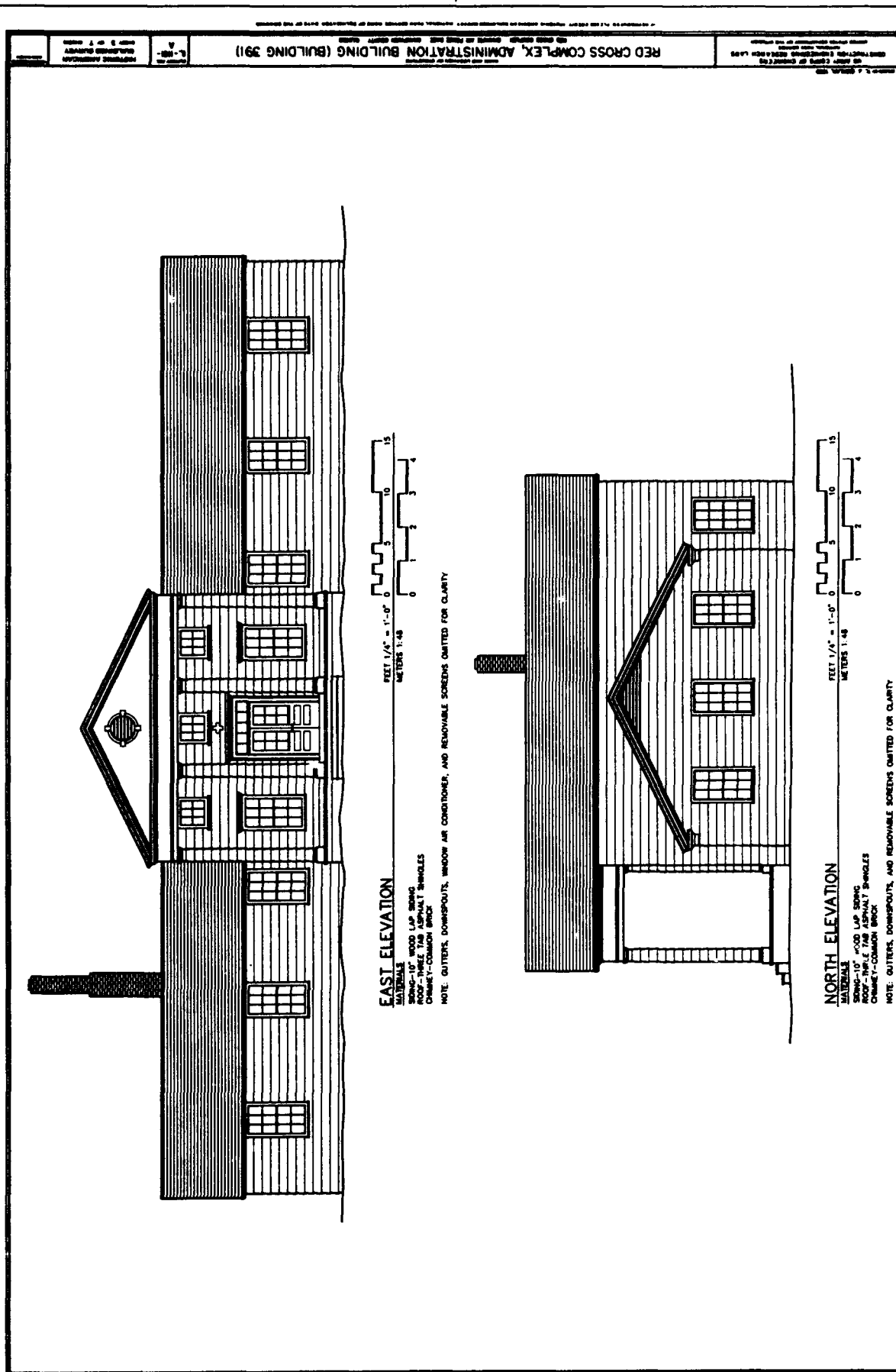
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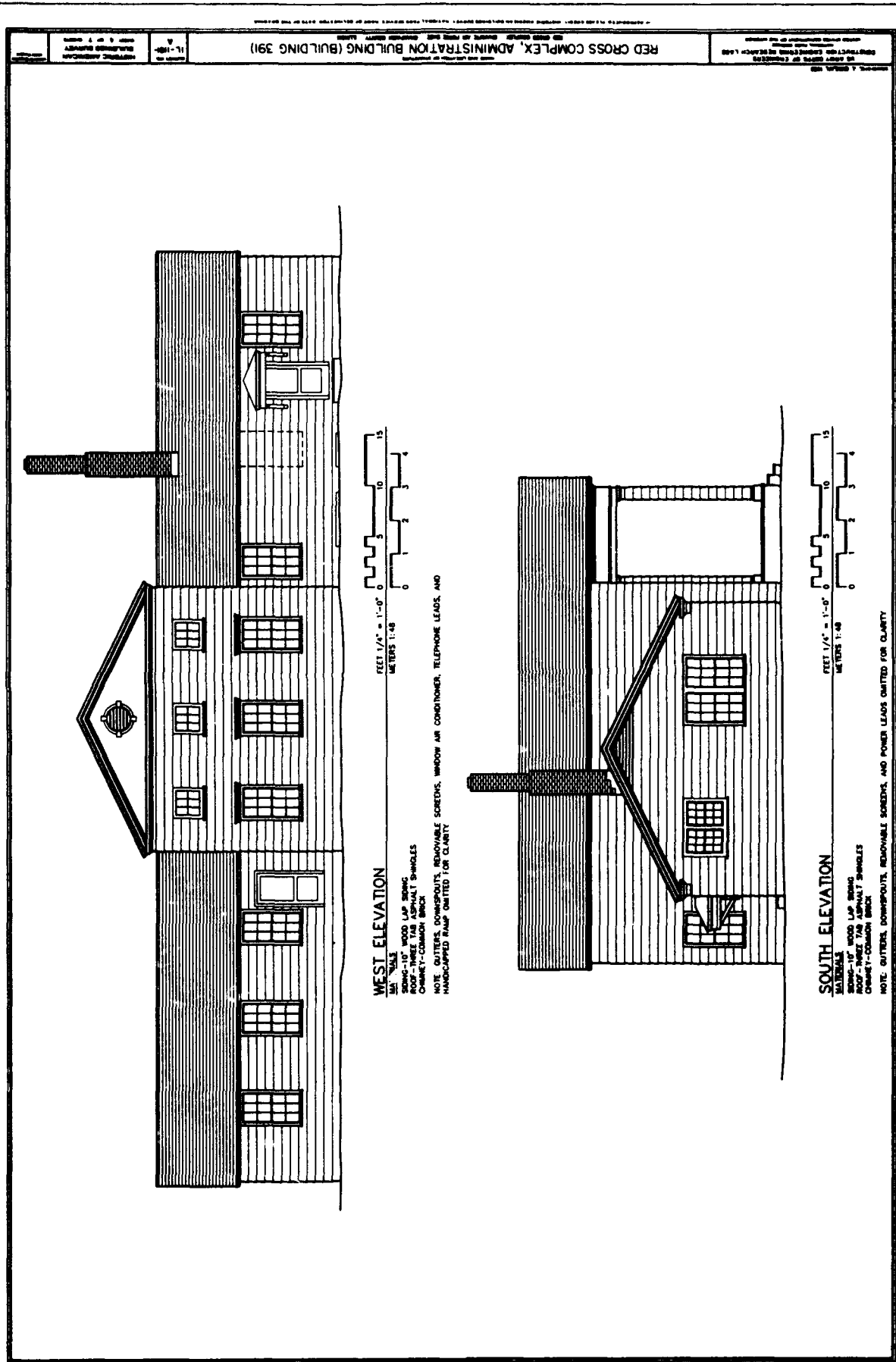


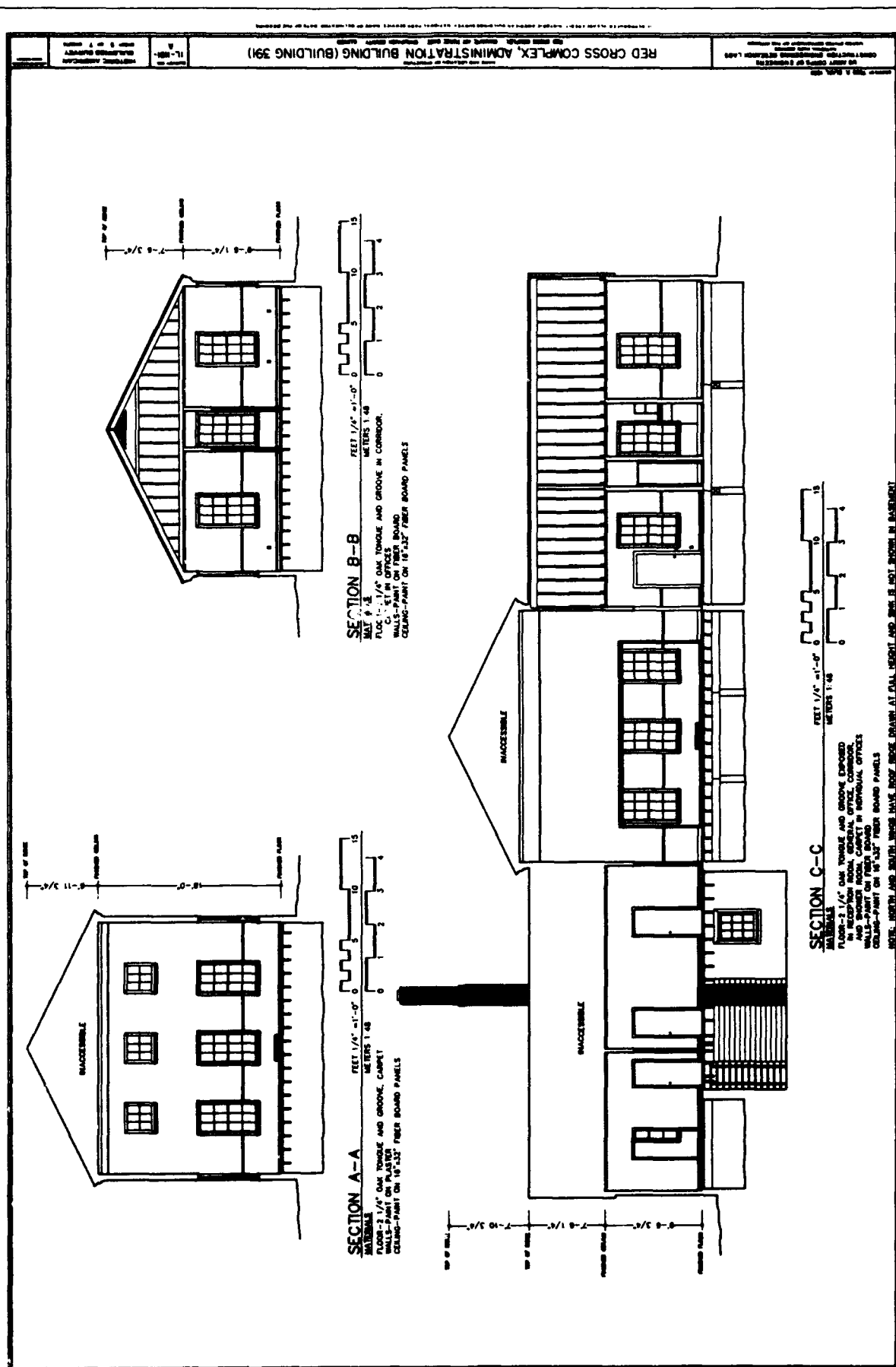
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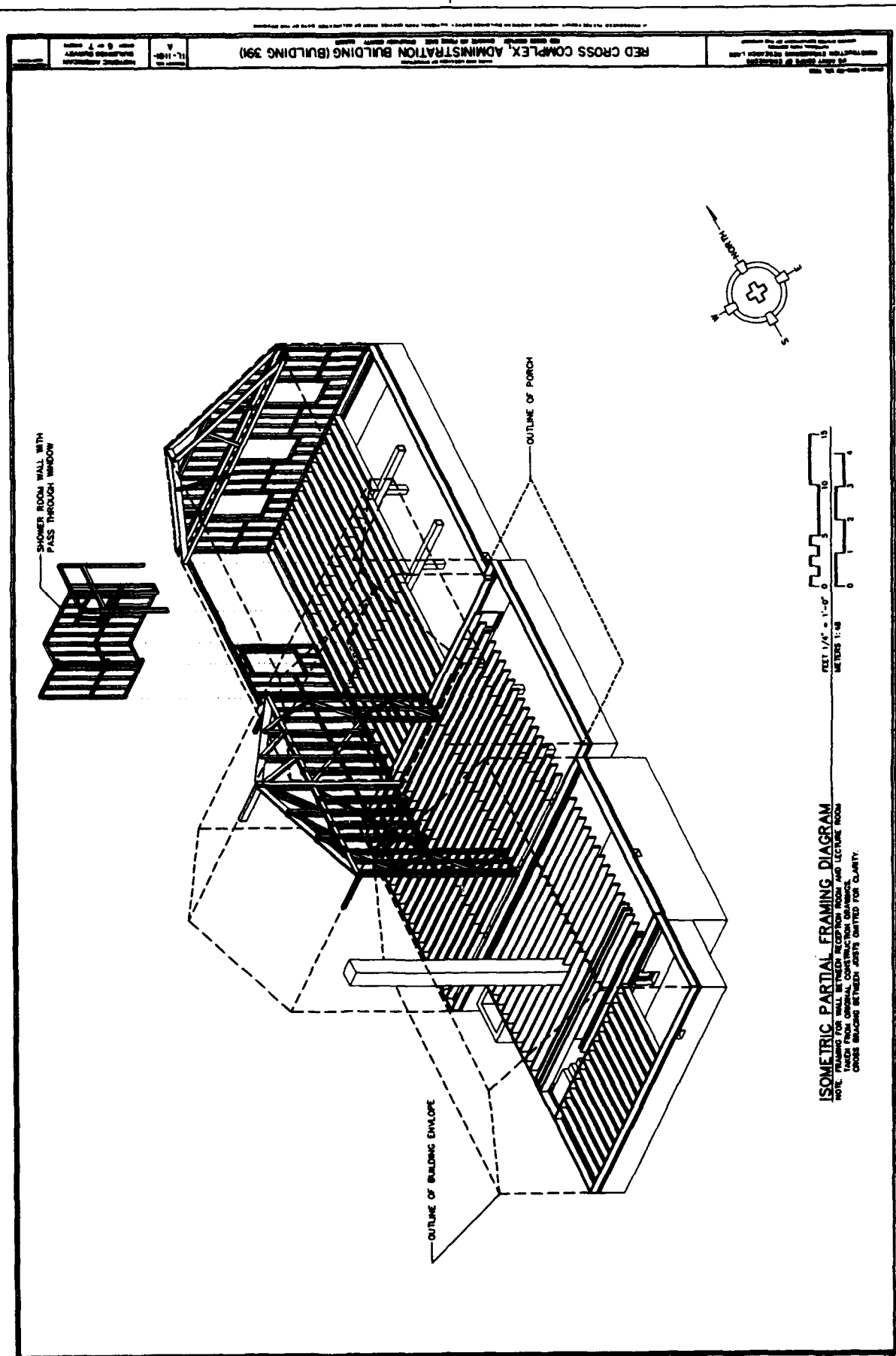












Red Cross Complex,
Garage (Building 392)
Southwest Corner of Eagle and Borman Drives
Chanute Air Force Base
Rantoul
Champaign County
Illinois

HABS No. IL-1161-B

PHOTOGRAPHS

Historic American Buildings Survey
National Park Service
Rocky Mountain Regional Office
Department of the Interior
12795 W. Alameda Parkway
Denver, Colorado 80225

HISTORIC AMERICAN BUILDINGS SURVEY

INDEX TO PHOTOGRAPHS

Red Cross Complex, HABS No. IL-1161-B
Garage (Building 392)
Southwest corner of Eagle and Borman Drives
Chanute Air Force Base
Rantoul
Champaign County
Illinois

Martin Stupich, Photographer, December 1990

IL-1161-B-1 VIEW OF GARAGE EAST FRONT

IL-1161-B-2 VIEW OF GARAGE WEST REAR

Note: For additional written historical and descriptive information, please see the main entry for the Red Cross Complex, HABS IL-1161.

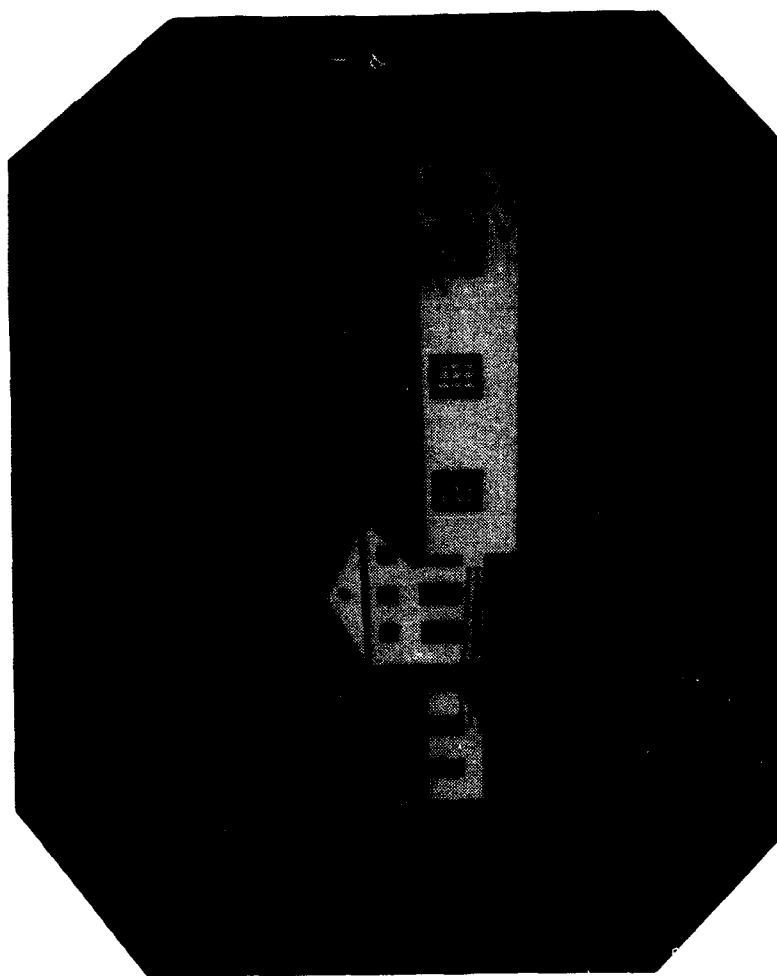
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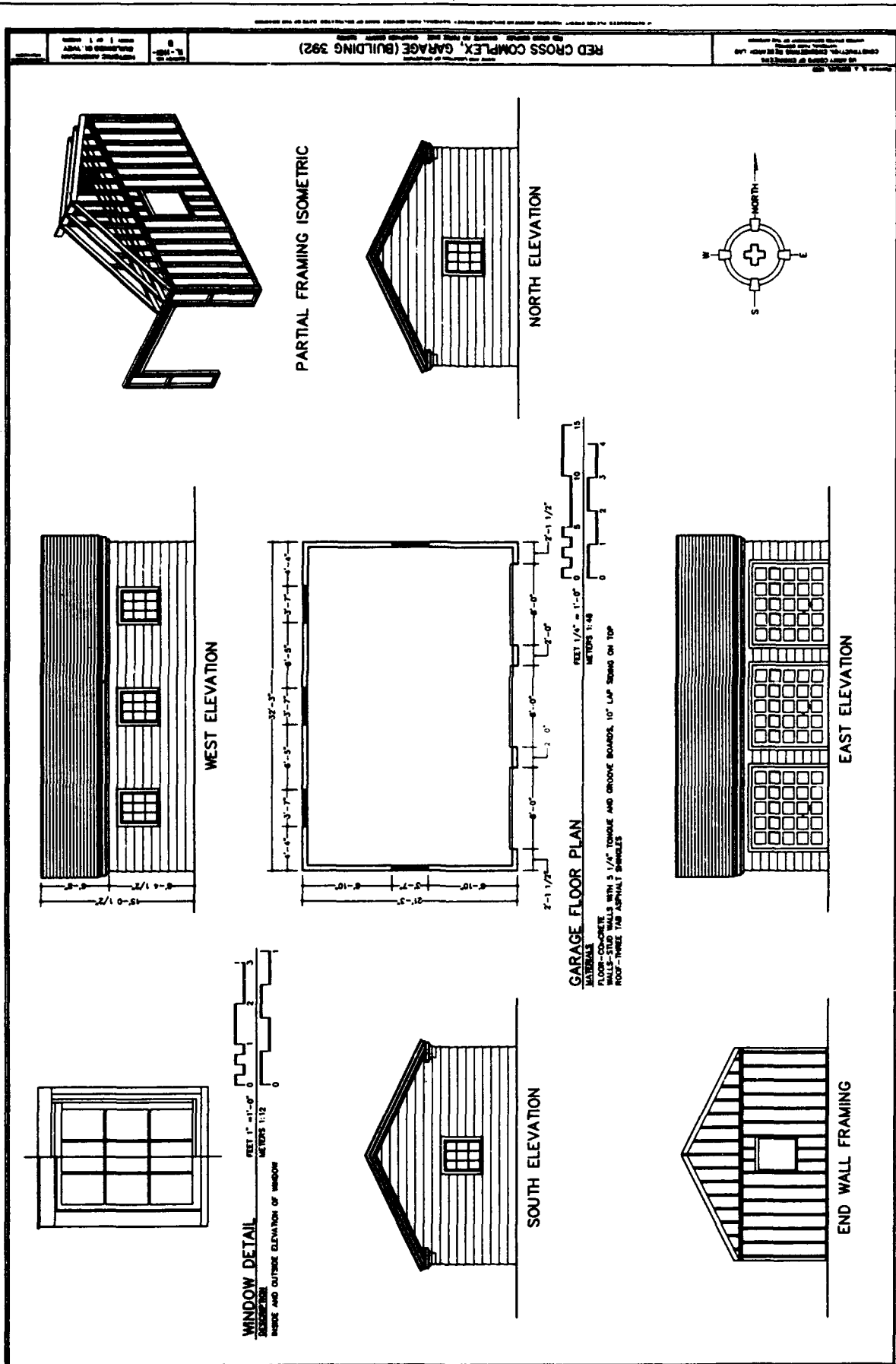
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HABS No. IL-1161-B-2





Appendix C: Example of Level III and Level IV HABS Documentation

HABS/HAER INVENTORY

HABS No. IL-1161-A

Building Number: 391
Structure Name: Red Cross Administration Building
Location: Southwest corner, Eagle and Borman Drives,
Chanute Air Force Base, Rantoul, Illinois
Construction Date: 1941-1942
Use Original/Present: Red Cross Field Director's Office &
Residence/Vacant
Rating: N/A
Condition: The building is in good condition, with only
slight alterations.

Description:

The Red Cross Building is a two story central block (facing east) flanked by north-south one story symmetrical wings. As the central mass is wider than the wings, the building appears cross-shaped from above. The frame structure has a gable roof with red asphalt shingles. The entry is set under a two story open porch with four square wooden columns on the main block (east elevation). Double doors are capped with a five pane transom; the doors and the flanking windows have raked cornices. The columns support a full entablature and pediment, with a compass-window style attic vent centered in the pediment. The brick chimney is located on the west slope of the south wing. Walls are covered with hard board siding. Windows are 6/6 double hung wood sash. Foundation is poured concrete, and floors are oak tongue and groove. The interior is divided into offices, general reception and class rooms, and living quarters. Interior walls and ceilings are fiber board, and a millwork cornice appears at the top of all walls.

History:

Construction of this building was the result of a contract between the U.S. Army Corps of Engineers (in contract with the American National Red Cross) and E.N. DeAtley of Champaign, Illinois. Groundbreaking occurred during the last week of November 1941, and the structure was formally dedicated on March 15, 1942. By July, Chanute Field had been designated as a training post for future Red Cross field directors, six of whom had arrived to begin training. For fifty years, the field directors and their staff at Chanute provided armed forces

Continuation of: Red Cross Administration Building

personnel with consultation and guidance, information referrals, reporting services, assistance with family communications and finances, and health services. Chanutte Air Force Base is scheduled for closure by September 1993 and, in anticipation of this, the Red Cross Building was closed at the end of August 1992.

Significance:

The Red Cross Building at Chanutte Air Force Base physically and symbolically reflects the mission of aid to the armed services that stands as a distinguishing characteristic of the American Red Cross. Built at the height of World War II military construction activities, the Red Cross Building provided a link between civilians and armed forces at Chanutte during a time of intense interaction between both groups. The structure's shape and colors reproduce a red cross, thereby using form to declare function. The resultant building is architecturally unique among other temporary World War II structures on the base.

Sources:

Historical data on the Red Cross Building comes from various issues of the base newspaper, "Chanutte Field Wings," between November 1941 and July 1942.

History of the American National Red Cross is from "The American Red Cross: A History," by Foster Rhea Dulles, 1950.

Historic structure evaluations have been produced for Chanutte by King and Peyton for The Earth Technology Corporation in 1991, and by D.E. McGillem and Associates in 1990.

Architectural information was supplemented by a measured drawing, "Chanutte Field Illinois, Red Cross Building, Elevations," by N.B. Popov for U.S. Engineer Office, Chicago District Air Corps, Construction, Feb. 12, 1943.

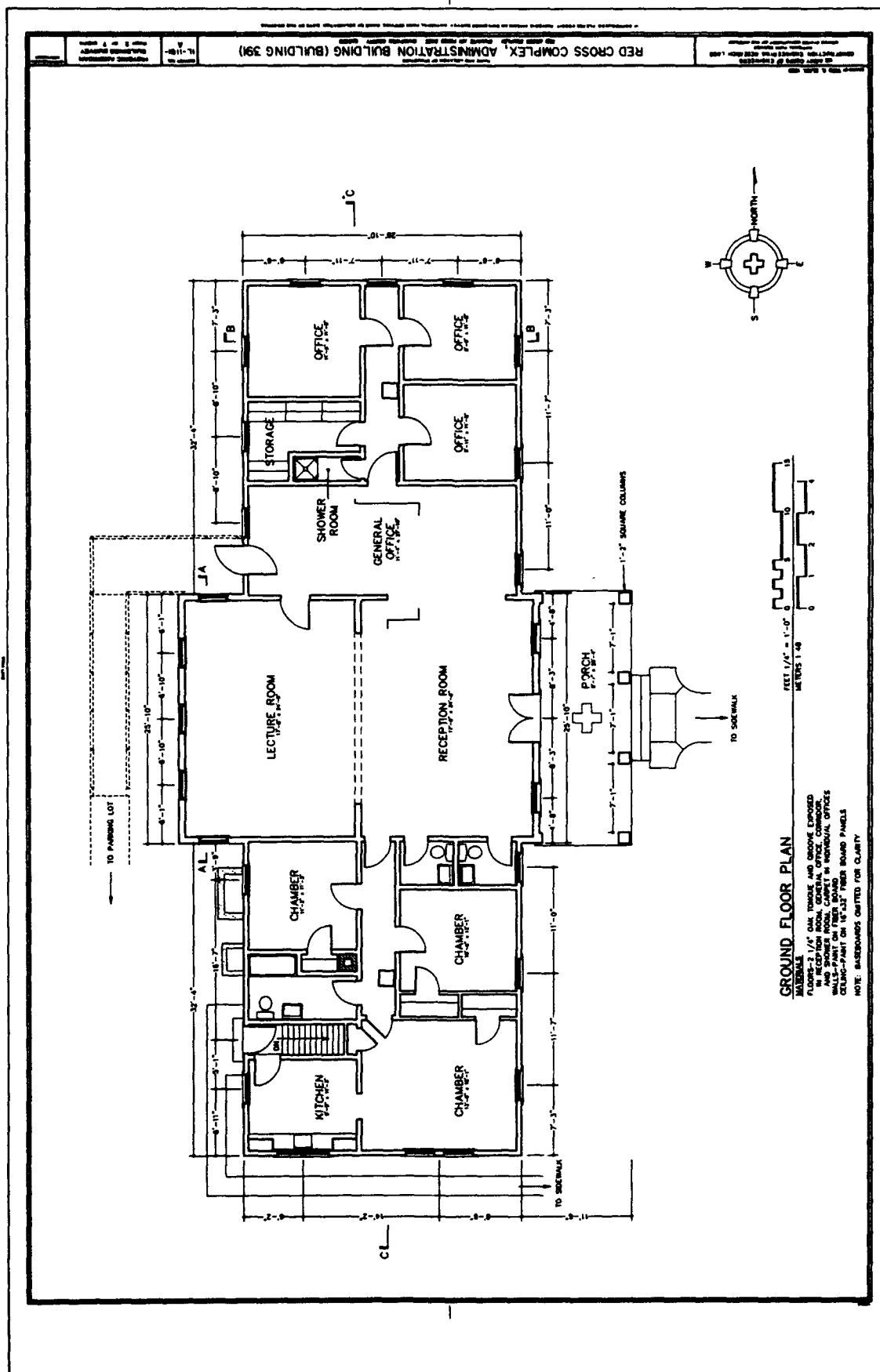
Inventoried By: Susan Ensore

Affiliation: Tri-Services Cultural Resources Research Center
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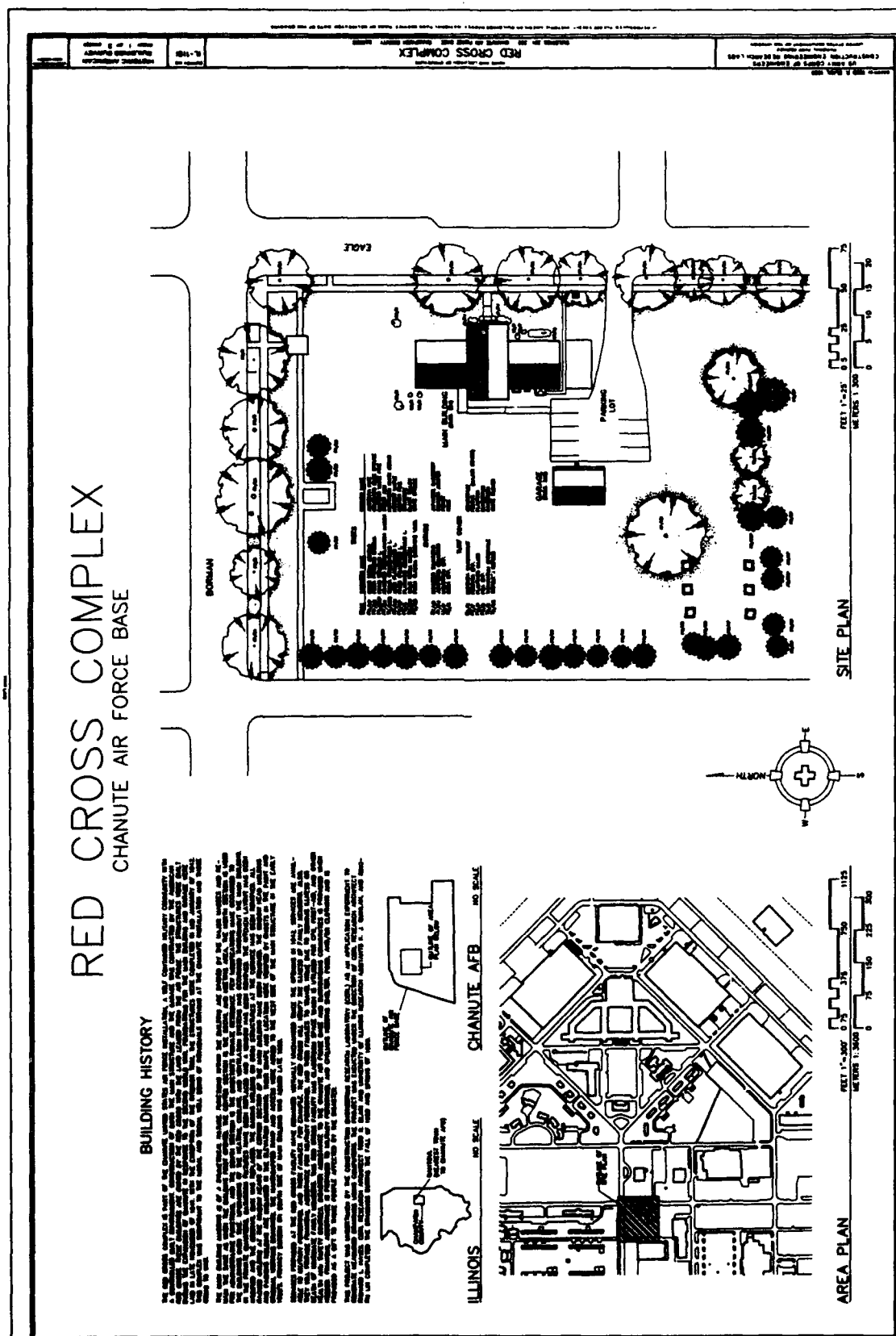
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Note: See Appendix B, Examples of Level I and II Documentation, for sample exterior photographs required for Level III documentation. Similar 35mm exterior views are required for Level IV documentation.

Sketch Plan



Site Plan



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